

**ENVIRONMENTAL ASSESSMENT
AND
FINDING OF NO SIGNIFICANT IMPACT**

For

**Soldier Squad Performance Research Institute (S2PRINT) Building Construction Project
U.S. Army Soldier Systems Center
Natick, Massachusetts**

November 2017

Prepared for

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FINDING OF NO SIGNIFICANT IMPACT

Soldier Squad Performance Research Institute (S2PRINT) Building Construction Project U.S. Army Soldier Systems Center Natick, Massachusetts

The U.S. Army Natick Soldier Systems Center (NSSC) is located in Natick, Massachusetts, approximately 20 miles west of Boston and 30 miles east of Worcester. The installation is located on a peninsula on the eastern shore of the South Basin of Lake Cochituate. The Army built the Natick Laboratory in 1954 and has since used the area for industrial, laboratory, and storage activities for research and development in food science, aero-mechanical, clothing, material, and equipment engineering.

The Soldier Squad Performance Research Institute (S2PRINT) Building Construction Project Environmental Assessment (EA) is a decision-support document and the recommended or proposed actions must be assessed for their environmental effects in accordance with 32 CFR Part 651. An EA is completed to evaluate the potential impacts and cumulative effects of projects being proposed. The EA also provides responsible and timely protection, conservation, and enhancement of project environmental and cultural resources and ensures environmental mandates and considerations are incorporated in the planning process.

The current laboratory facilities at the NSSC Installation are not equipped with the advanced physiological or technological capabilities required to achieve mission objectives and to maximize combat effectiveness. In addition, existing laboratory facilities at the NSSC are fully utilized. The proposed project involves the construction of a 78,500 square foot three-story building to support the S2PRINT mission assignments and to offset deficits of laboratory facilities on the installation. The S2PRINT facility will contain advanced research and development capabilities and will also accommodate administrative, laboratory and storage space. Sustainable design principles shall be fully integrated into the design and construction of this project. The building, including building envelope, heating/ventilation and air conditioning (HVAC) systems, service water heating, power and lighting systems, will be designed to reduce energy consumption. The project will be Leadership in Energy and Environmental Design (LEED) Silver certified.

The Murphy Clinic (Building 30) and a small trailer (Building 112) will be demolished as part of the project and the new facility will also displace over 60 parking spaces. Replacement parking will involve the re-striping of the existing Parking Lot C, which will gain 33 spaces, in combination with the construction of a new parking lot located south of the new S2PRINT building on the NSSC main campus. This proposed new parking lot will have 32 individual spaces for a total of 65 new spaces. The new parking lot will be constructed using pervious pavement to infiltrate surface water runoff.

The S2PRINT Building Construction Project EA is compliant with the National

Environmental Policy Act (NEPA), Council of Environmental Quality (CEQ) regulations 40 CFR, 1500–1517, and Policy and Procedures for Implementing NEPA Army Regulation (AR) 200-2 (23 December 1988) and 32 Code of Federal Regulation (CFR) Part 651 (29 March 2002). I find that based on the evaluation of environmental effects discussed in this document, the proposed S2PRINT Building Construction Project is not a major federal action significantly affecting the quality of the human environment. Under the Council on Environmental Quality (“CEQ”) NEPA regulations, “NEPA significance” is a concept dependent upon context and intensity (40 C.F.R. § 1508.27). The CEQ regulations identify a number of factors to measure the intensity of impact. These factors are discussed below, and none are implicated here to warrant a finding of NEPA significance. A review of these NEPA “intensity” factors reveals that the proposed action will not result in a significant impact - neither beneficial nor detrimental - to the human environment.

Impacts on public health or safety: The proposed new S2PRINT building will be located over an existing groundwater plume which is contaminated with trichloroethene (TCE). A vapor barrier will be incorporated into the building design. Once the sub-slab vapor barrier is installed and the building envelope complete, at least one round of indoor air sampling will be completed to verify conditions. Following testing, additional measures (e.g., installation of an Active Depressurization Technologies [ADT] system) will be installed as determined to be necessary during post construction monitoring. During the construction phase of the proposed project, heavy equipment and vehicles will be transported to the site, however, access to the site will be limited during construction. Therefore, the project is expected to have no effect on public health and safety.

Unique characteristics: The S2PRINT Building Construction Project will not impact wild and scenic rivers, prime farmlands, cultural and historic resources or waters of the United States.

Controversy: The proposed project is not controversial.

Uncertain impacts: The impacts of the proposed project are not uncertain, they are readily understood based on past experiences the Army NSSC has had with similar construction projects.

Precedent for future actions: The S2PRINT Building Construction Project EA was prepared pursuant to applicable laws and regulations and would not establish a precedent for future actions.

Cumulative significance: As discussed in the EA, no cumulative impacts to fish and wildlife, federal or state protected species or cultural resources are anticipated when the proposed S2PRINT project is evaluated together with past, present and reasonably foreseeable actions at the NSSC. Socioeconomics of the area may benefit as construction employees utilize local businesses and provide additional short-term revenue in the local

community.

Historic resources: The Quartermaster Research and Development Center (QRDC) Historic District encompasses approximately 30 of the facility's 78 acres. The location of the new S2PRINT building is adjacent to Buildings 2 and 42, located within the QRDC. Therefore, the primary effect of the proposed S2PRINT building to the QRDC Historic District will be visual since it will be constructed directly adjacent, but not in the historic district. Coordination with the MA SHPO has been initiated, but cannot be concluded until a building design is available. Once the building design is available, an effects determination will be prepared and coordinated with the State Historic Preservation Office (SHPO). Construction of the S2PRINT building will not be undertaken until coordination pursuant to the Historic Preservation Act is completed.

Endangered species: The project will have no known negative impacts on any federal or state threatened or endangered species. The Northern Long-eared Bat (*Myotis septentrionalis*) (NLEB), a federally listed "Threatened" species, is found throughout Massachusetts. During the summer of 2016, the NSSC conducted an acoustic monitoring survey on the 78-acre NSSC property. This survey documented full spectrum recordings of bat echolocation calls during the summer maternity season when pregnant/lactating females and their pups are most active and most likely to be encountered. The NLEB was not detected during this study and therefore, the NSSC has determined that the S2PRINT project will have no effect on NLEB. In accordance with the Massachusetts Natural Heritage Atlas 14th Edition (Effective August 1, 2017), no Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife are designated in the NSSC property or vicinity by the Massachusetts Natural Heritage and Endangered Species Program. Therefore, no impacts to state listed rare species will occur as a result of the AFH demolition and construction project.

Potential violation of federal law: This action will not violate federal law.

Based on my review and evaluation of the environmental effects as presented in the Environmental Assessment, I have determined that the Army Natick Soldier Systems Center S2PRINT Building Construction Project is not a major federal action significantly affecting the quality of the human environment. Therefore, I have determined that this project is exempt from requirements to prepare an Environmental Impact Statement.

Date

BRYAN M. MARTIN
LTC, SF
Commanding
Natick Soldier Systems Center

DRAFT

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ENVIRONMENTAL ASSESSMENT
Soldier Squad Performance Research Institute (S2PRINT) Building Construction Project
Natick Soldier Systems Center

1.0 INTRODUCTION

1.1 Purpose and Need

The mission of the U.S. Army Natick Soldier Systems Center (NSSC) is to conduct Research, Development and Engineering to maximize the warfighter's survivability, sustainability, mobility, combat effectiveness and field quality of life. The current laboratory facilities at the NSSC are not equipped with the advanced physiological or technological capabilities required to achieve the mission objectives. In addition, the existing laboratory facilities at the NSSC are fully utilized. The proposed project involves the demolition of two buildings and the construction of a 78,500 square foot (sf) three-story building on the NSSC main campus to support the Soldier Squad Performance Research Institute (S2PRINT) mission assignments and to offset deficits of laboratory facilities on the installation. Re-striping existing Parking Lot C and constructing a new parking lot south the S2PRINT building will provide replacement parking for individual spaces displaced by the building footprint.

The S2PRINT facility will contain advanced research and development capabilities and will also accommodate administrative, laboratory and storage space. Sustainable design principles shall be fully integrated into the design and construction of this project. The building, including building envelope, HVAC systems, service water heating, power and lighting systems, will be designed to reduce energy consumption. The project will be Leadership in Energy and Environmental Design (LEED) Silver certified.

The NSSC prepared an Environmental Assessment (EA) for the construction of the S2PRINT building and replacement parking. The project EA is a decision-support document which is completed to evaluate the potential impacts and cumulative effects of the proposed project. The EA also provides responsible and timely protection, conservation, and enhancement of project environmental and cultural resources and ensures that environmental mandates and considerations have been incorporated in the planning process. The S2PRINT project EA has been prepared pursuant to the National Environmental Policy Act (NEPA), Council of Environmental Quality (CEQ) regulations 40 CFR, 1500–1517, and Policy and Procedures for Implementing NEPA Army Regulation (AR) 200-2 (23 December 1988) and 32 Code of Federal Regulation (CFR) Part 651 (29 March 2002).

2.0 PROJECT DESCRIPTION

2.1 Location and Site History

The U.S. Army Soldier Systems Center is located in Natick, Middlesex County, Massachusetts, approximately 20 miles west of Boston and 30 miles east of Worcester. The Natick Soldier Systems Center (NSSC) Installation is located on a peninsula on the eastern shore of the South Basin of Lake Cochituate. The NSSC is bounded on the west, south, and east by Lake Cochituate and bounded on the north by General Greene Avenue (formerly Kansas Street) and residential housing (see Figure 1 – Natick Soldier Systems Center Location Map). The NSSC has over 120 buildings located on 174 acres in the Town of Natick and neighboring communities. The main campus is 78 acres.

The site was purchased by the Army in 1949 from the Metropolitan District Commission. At that time, it was used primarily as a forested recreational area. The Army built the Natick Laboratory in 1954 and has since used the area for industrial, laboratory, and storage activities for research and development in food science, aero-mechanical, clothing, material, and equipment engineering. U.S. Army Soldier Systems Command (SSCOM), activated in November 1994, provides dedicated research, development, engineering and acquisition support for the soldier in any and all environments (U.S. Department of Defense 2015).

The S2PRINT project site is located on the NSSC main campus adjacent to the Doriot Climate Chambers (Building 2). The project construction includes the demolition of the one-story Murphy Clinic (Building 30), the demolition of a small trailer (Building 112) and removal of portions of an existing parking lot equaling approximately 60 parking spaces. Replacement parking will be provided through the re-striping of Parking Lot C and the construction of a new parking lot south of the S2PRINT Building (see Figure 2 – S2PRINT Building and Replacement Parking Locations). Land use in the vicinity of the NSSC installation includes residential, commercial/retail and light industrial facilities.

2.2 Installation Mission and Description

The mission of the Natick Soldier Systems Center (NSSC) is to conduct research, development, acquisition and sustainment to maximize combat effectiveness and survivability of soldiers. The NSSC accomplishes its mission by providing total life cycle management of the soldier and related support systems through centralized development, procurement, integration, and management of equipment, clothing, food and protection for the individual soldier as well as shelters, airdrop, field service and organizational equipment. Natick, as all other Army installations, falls under the Installation Management Agency (IMA), which provides equitable, effective and efficient management of the Installation and serves as NSSC's parent organization.

Figure 1 – Natick Soldier Systems Center Location Map

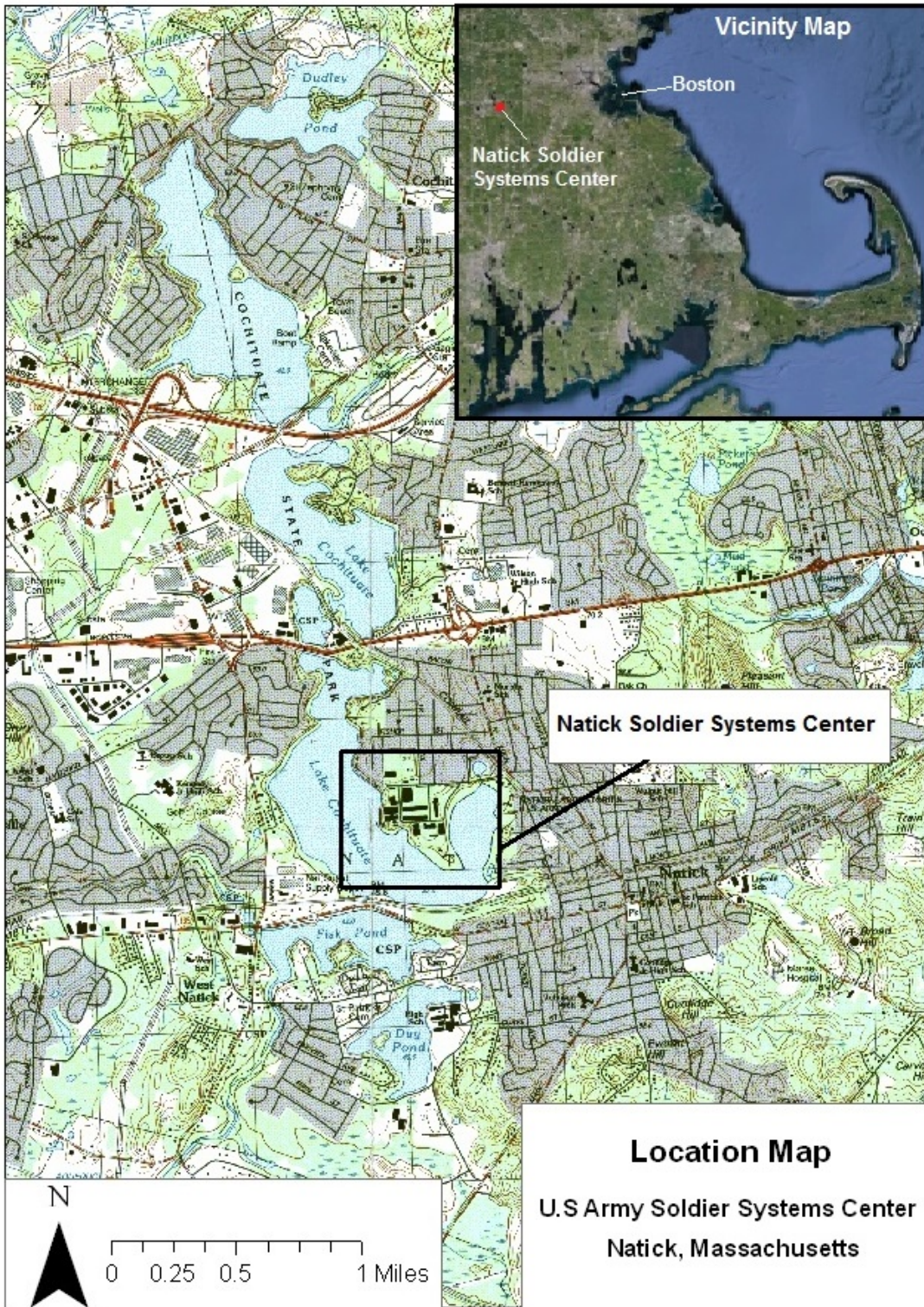


Figure 2 – S2PRINT Building and Replacement Parking Locations



Facilities at the NSSC include administration, laboratories, maintenance, storage, and housing areas. A self-contained city, NSSC also has a shopette, cafeteria, barbershop, credit union, recreation center, travel office and other unique facilities which allow the researchers an unparalleled capability to support America's troops. NSSC has the following unique/specialized facilities: Climatic Chamber, Altitude Chamber, Textile Facility, Combat Rations Production and Packaging Facility, Biomechanics Lab, 3-D Anthropometrics Lab, Camouflage Evaluation Facility, Raincourt, Hydro-Environmental Chamber, Shade Room, Fiber Plant, Thermal & Flame Lab, and a Military Operation in Urban Terrain (MOUT) Lab/Facility. The major partners at the NSSC Installation include the Natick Soldier Center, United States Army Research Institute of Environmental Medicine, Program Executive Office (PEO)-Combat Service/Combat Service Support, PEO – Soldier, Navy Clothing and Textile Research Facility (NCTRF), Coast Guard Clothing Design and Technical Office and Integrated Logistics Support Center. The NSSC has a total workforce of approximately 120 Active Duty, 2,000 federal civilians, and 250 civilian contractors (U.S. Department of Defense 2015).

2.3 S2PRINT Building Construction Project (Preferred Alternative – Site D)

The proposed S2PRINT Building Construction Project includes the construction of a 78,500 square foot (sf) building designed to contain advanced research and development capabilities and will also accommodate administrative, laboratory and storage space. The project also includes the demolition of the Murphy Clinic (Buildings 30), which is used as office space, a small trailer (Building 112), and the removal of portions of an existing parking lot prior to the construction. Sustainable design principles shall be fully integrated into the design and construction of this project. The building envelope, heating/ventilation and air conditioning (HVAC) systems, service water heating, and power and lighting systems will be designed to reduce energy consumption. The project will be Leadership in Energy and Environmental Design (LEED) Silver certified (see Figure 3 –S2PRINT Building Project Demolition Area).

Existing utilities at the NSSC are adequate to support this project. Points of connection to communications, water, sanitary sewer, natural gas and electrical systems/services are within the general area of the project site. The water system is government owned and government operated, and is connected to the Town of Natick water system (water is purchased from the Town of Natick). Connections to the domestic water system and the fire suppression system (which are separate systems) would be made to a 6 inch and 10 inch water line, respectively.

The sanitary sewer system on the NSSC installation is government owned and government operated that connects to the Town of Natick sanitary sewer system. The Town of Natick provides waste water treatment. The S2PRINT building will have a gravity system which will not only connect to the existing sanitary sewer system, but also to the existing natural gas, electrical, fiber optics and voice systems.

Stormwater will be transported via a closed pipe system dispersing into the installation storm drainage system. There is an oil/water separator in the current installation drainage system which is of sufficient capacity to accommodate project runoff. Stormwater from the proposed site will be managed using on-site Low Impact Development (LID) measures, such as bio-retention areas, swales and reducing impervious areas, will be used to the maximum extent possible to improve the management of stormwater on the site. In addition, the contractor will be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) prior to construction. Stormwater management design must comply with Section 438 of the 2007 Energy Independence and Security Act (EISA), applicable Massachusetts Department of Environmental Protection (MassDEP) regulations and Unified Facilities Criteria (UFC) 3-210-10 Low Impact Development requirements.

The proposed new S2PRINT building (in the area of Building 30 and 112) is located over an existing groundwater plume (approximately 28 feet below the ground surface) which is contaminated with trichloroethene (TCE) (for additional information see Section 4.1.4 *Hazardous Materials*). As recommended in the June 2015 U.S. Environmental Protection Agency Office of Solid Waste and Emergency Response (OSWER) Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor to Indoor Air (USEPA 2015b), a vapor barrier, comprised of a low-permeability membrane, will be installed between the soil and the building during construction. It is anticipated that a vapor barrier will be sufficient to prevent vapor intrusion into the new building. Once the sub-slab vapor barrier is installed and the building envelope complete, at least one round of indoor air sampling will be completed to verify conditions. Additional measures (e.g., installation of an Active Depressurization Technologies [ADT] system) will be installed as determined to be necessary during post construction monitoring. In addition, construction dewatering, if necessary, will be handled in accordance with applicable federal and state regulations.

The Department of Army Sustainable Design and Development Policy Update dated 17 January 2017 requires that any existing invasive plants be removed from the project site and destroyed or disposed of in an authorized landfill. The Policy also requires that invasive plants are not planted on the project site in accordance with the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ANSI/ASHRAE/USGBC/IES Standard 189.1-2014 ASHRAE) Standard for the Design of High-Performance Green Buildings (ASHRAE 2014). The project contract specifications will include provisions for the removal of one large Norway maple (*Acer platanoides*) located within the new building footprint. Norway maple is a species considered invasive according to the 2005 Evaluation of Non-Native Plant Species for Invasiveness in Massachusetts (Massachusetts Invasive Plant Advisory Group 2005). Three flowering crabapple (*Malus* sp.) that were planted by the NSSC as ornamental landscaping trees will also need to be removed.

The loss of approximately 60 parking spaces will be replaced through the re-striping of Parking Lot C (which gains 33 parking spaces) in combination with the construction of a parking lot south of the S2PRINT building (providing 32 parking spaces) for a total of 65 parking spaces.

Approximately five trees; four oak (*Quercus* sp.) and one red maple (*Acer rubrum*) will need to be removed as part of the construction of the replacement parking (for a total of nine trees with inclusion of the four trees within the S2PRINT Building footprint). The new parking lot will be constructed using pervious pavement to infiltrate surface water and the parking lot will be located 50 feet or more from Lake Cochituate (see Figure 4 – Re-striping of Parking Lot C and Figure 5 – Parking Lot Construction South of the S2PRINT Building). Native shrubs/trees will be planted for soil stabilization and habitat enhancement along the periphery of the parking lot south of the S2PRINT building. There were no feasible locations for replacement parking further from wetland resource areas due the level of existing development at the NSSC.

Figure 3 –S2PRINT Building Project Demolition Area

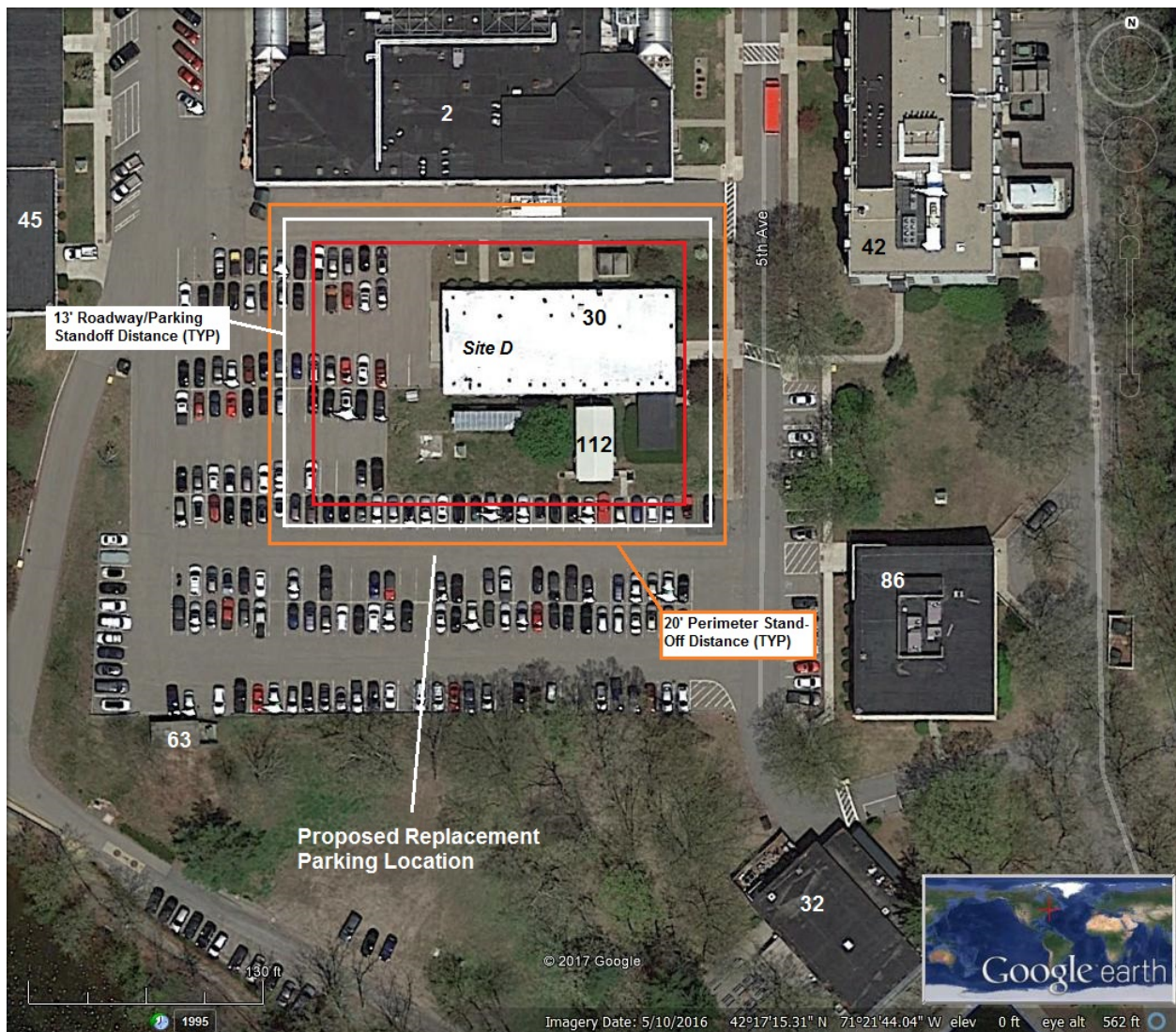


Figure 4 – Re-striping Parking Lot C

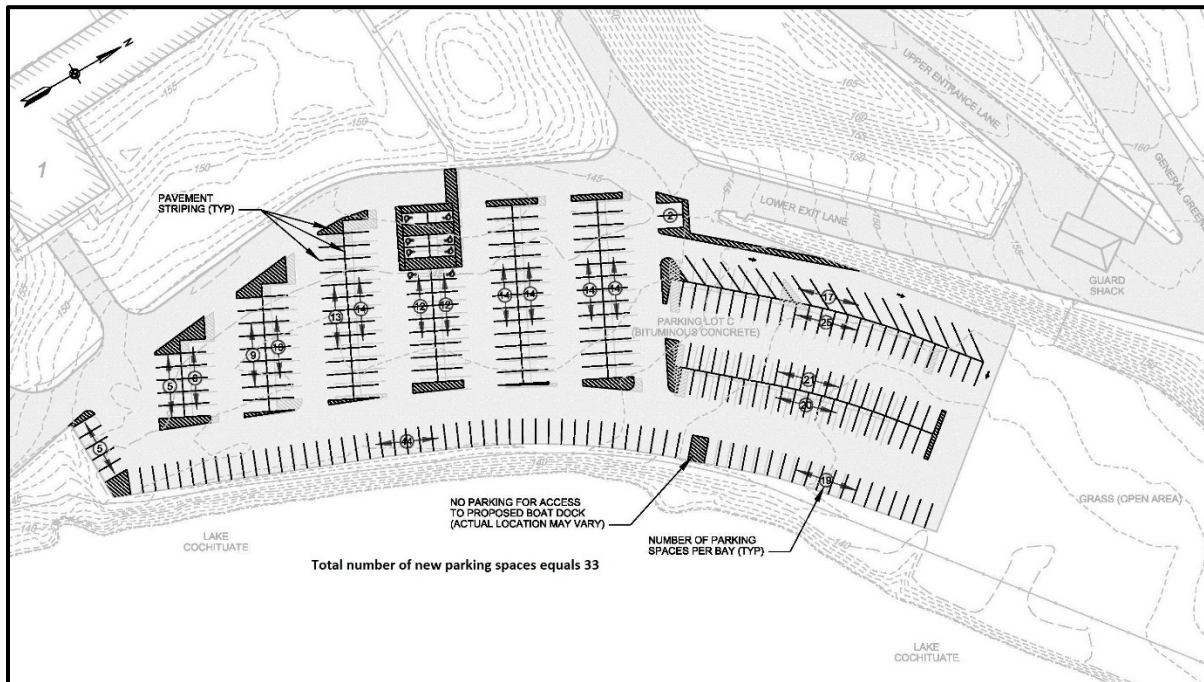
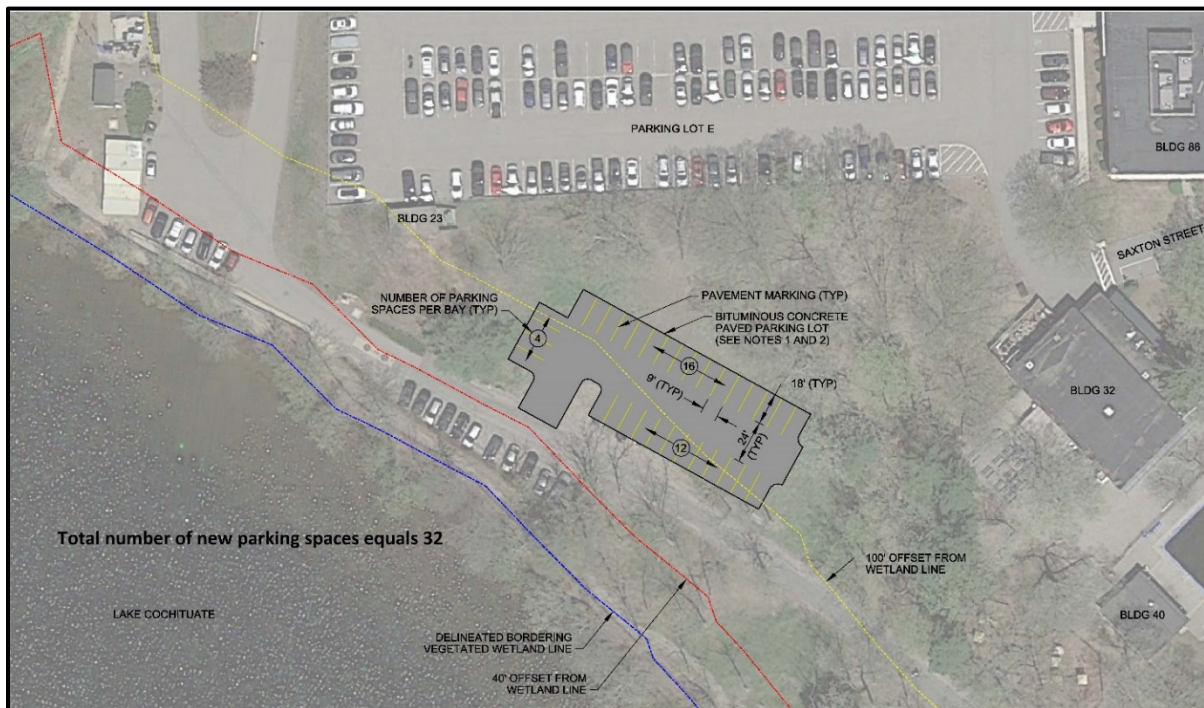


Figure 5 – Parking Lot Construction South of the S2PRINT Building



3.0 ALTERNATIVES

In addition to the No action Alternative, a detailed site analysis was performed by the U.S Army Corps of Engineers to identify and evaluated all potential locations for the proposed 78,500 sf S2PRINT building, alternatives for replacement parking and other real estate alternatives (e.g., leasing).

3.1 No Action Alternative

The No Action alternative serves as a baseline against which the proposed action and alternatives can be evaluated and is required by Council of Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA). The current laboratory facilities are not equipped with the advanced physiological or technological capabilities required to achieve the mission objectives. Under the No Action alternative, the Natick Soldier Research, Development and Engineering Center (NSRDEC) and Research Development Engineering Command will continue to have difficulty in fully supporting the Army goal of creating American ground forces that are more readily deployable, agile, versatile, lethal, durable, survivable, reliable and sustainable. The ability to develop and transfer technological innovations into usable systems for the modern battlefield will be limited without this laboratory. The continued use of antiquated facilities will limit the ability to meet the current mission objectives and rapidly respond to changing mission requirements. This alternative is nonviable.

3.2 Construct New S2PRINT Building

3.2.1 Site Location Evaluation

Fourteen potential sites at five locations were identified and evaluated for constructing the new 78,500 sf multi-story S2PRINT building. Ten of the site alternatives were located on the NSSC; the four remaining sites are at separate locations at NSSC's housing properties in Natick, Hudson, Wayland, and Needham, Massachusetts (see Figure 6 – Site Alternatives Location Map and Figure 7 – Alternatives for Building Site Location on the NSSC Facility).

Specific site evaluation criteria and criteria ranking scores were established to systematically evaluate each site. A variety of building and site conditions were considered for each alternative including, but not limited to, site contamination; topography; adjacency to wetlands, wildlife habitat, floodplain and historic properties; amount of site disturbance; building architecture; access for safety vehicles; compatibility with proposed uses; availability of parking; availability of utilities; current zoning; Anti-Terrorism Force Protection (ATFP) issues; etc. These site and building characteristics were grouped into five criteria used to evaluate each site entitled Parking, Master Plan/Zoning, Visibility/Location (on and off base)/Architectural Compatibility, Utilities and Anti-Terrorism Force Protection (ATFP). The site evaluation

criteria ranking scores ranged from 0 to 4 (0 = very poor; 1 = poor; 2 = fair; 3 = good; 4 = excellent). The site evaluation stressed the functional implications of each site, while recognizing that the more subjective aesthetic effects are no less important, but simply harder to quantify.

Each site was evaluated with respect to five selected site evaluation criteria (see Table 1). Based on the selected site evaluation criteria and criteria ranking scores, it was found that of the 14 sites, there were 5 sites that were considered optimal for siting the multi-story S2PRINT facility on the NSSC main campus in Natick, Massachusetts (see Table 2).

The top five sites were further evaluated for strengths and weaknesses.

Site D was determined to be the preferred alternative. Site D included the following positive attributes; location on the NSSC facility; architectural compatibility; space available for future expansion along the westerly side with no building demolition; consistent with Master Plan projects; proximity to Building 42 makes it an attractive alternative (the Health Clinic in Building 30 is to be relocated to Building 42 (to a proposed addition); does not impact other current Garrison Plans; and minimal environmental issues. In addition, the building location is not within the floodplain or within 100' of wetlands. This site is located 240 feet from the wetland boundary.

Site D is located over an existing groundwater plume (as were four other alternative locations on the NSSC campus). The plume, which is contaminated with trichloroethene (TCE), is located approximately 28 feet below the ground surface. Since the plume is deep in this location and TCE has low volatility in soil, the risk for vapor intrusion was considered to be low. However, the installation of a vapor barrier between the soil and the building during construction and additionally, the installation of an Active Depressurization Technologies [ADT] system (if determined to be necessary during post construction monitoring) would effectively mitigate the risk vapor intrusion and therefore, was not considered to be a limiting factor in site suitability (see Figure 10 – Groundwater Contamination and Section 4.1.4 *Hazardous Materials* for additional information).

The project will eliminate approximately 60 existing parking spaces and due to limited parking on the installation, replacement parking is required on at least a one to one ratio. Replacement parking will be provided by re-striping existing Parking Lot C in combination with the construction of a parking lot south of the S2PRINT building (see Section 3.2.2 Replacement Parking Alternatives). The S2PRINT Building is adjacent to the Quarter Master Historic District. Coordination with the MA SHPO has been initiated and will be concluded when a building design is available.

Table 1. Site Evaluation Summary

Criteria	Sites													
	A	B	C	D	E	F	G*	H	I	J	K**	L**	M**	N**
Parking	1	2	4	1	3	1	4	4	0	0	0	0	0	0
Master Planning/Zoning	2	1	2	2	3	1	2	0	0	1	0	0	0	0
Visibility/Location/ Architectural Compatibility	3	2	1	3	2	1	1	2	1	4	0	0	0	0
Utilities	3	1	2	4	3	1	1	3	2	3	1	0	0	0
ATFP	2	2	2	3	3	2	2	4	1	1	2	2	2	2
Score Totals	11	8	11	13	14	6	10	13	4	9	3	2	2	2

*Sites G1/G2 were evaluated as a single site with scores based on an aggregate score.

**Sites K (Heritage), L (Hudson), M (Wayland), and N (Needham) are the off-site housing locations.

Table 2. Site Ranking (Top 5 Sites)

Site Ranking	Site
1	E
2	D
3	H
4	C
5	A

Note: See Figure 6 for site locations

Figure 6 –Site Alternatives Location Map

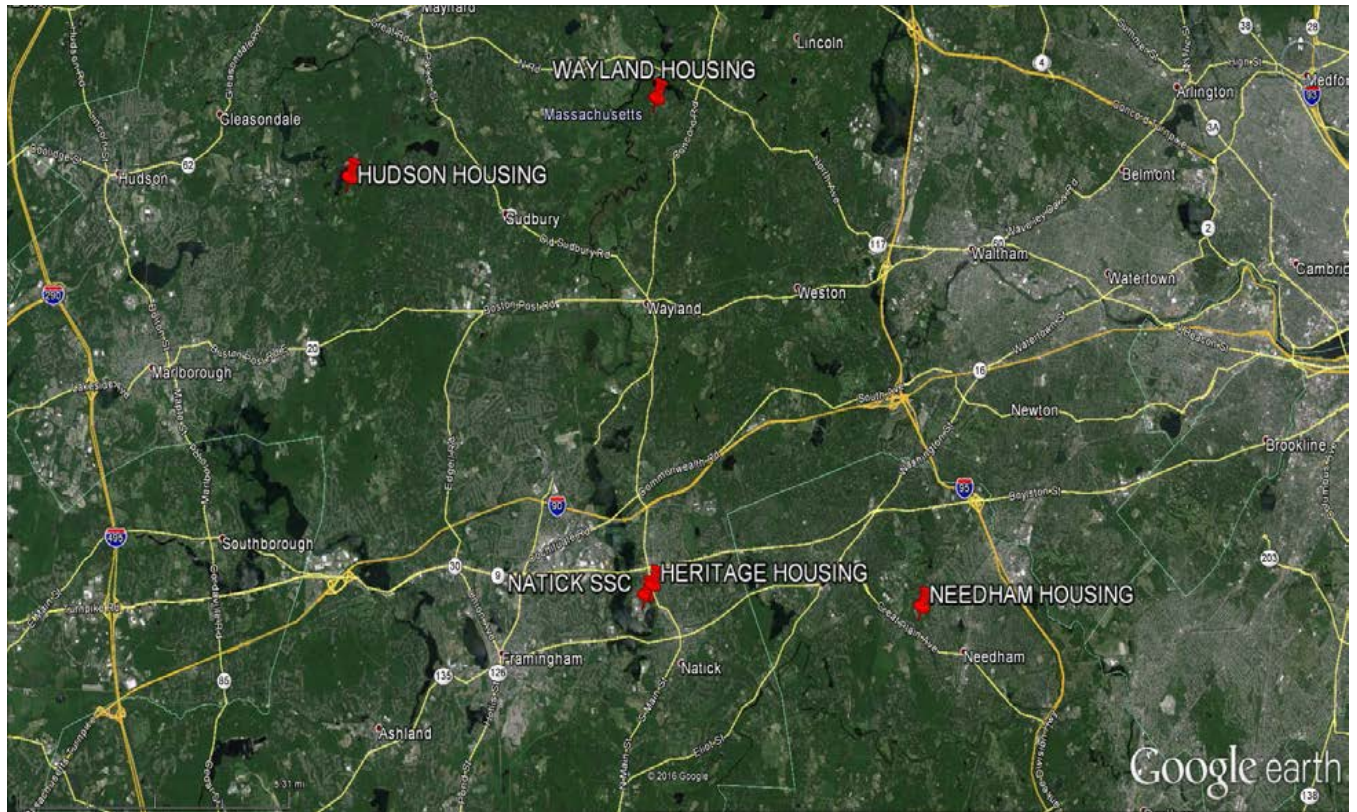
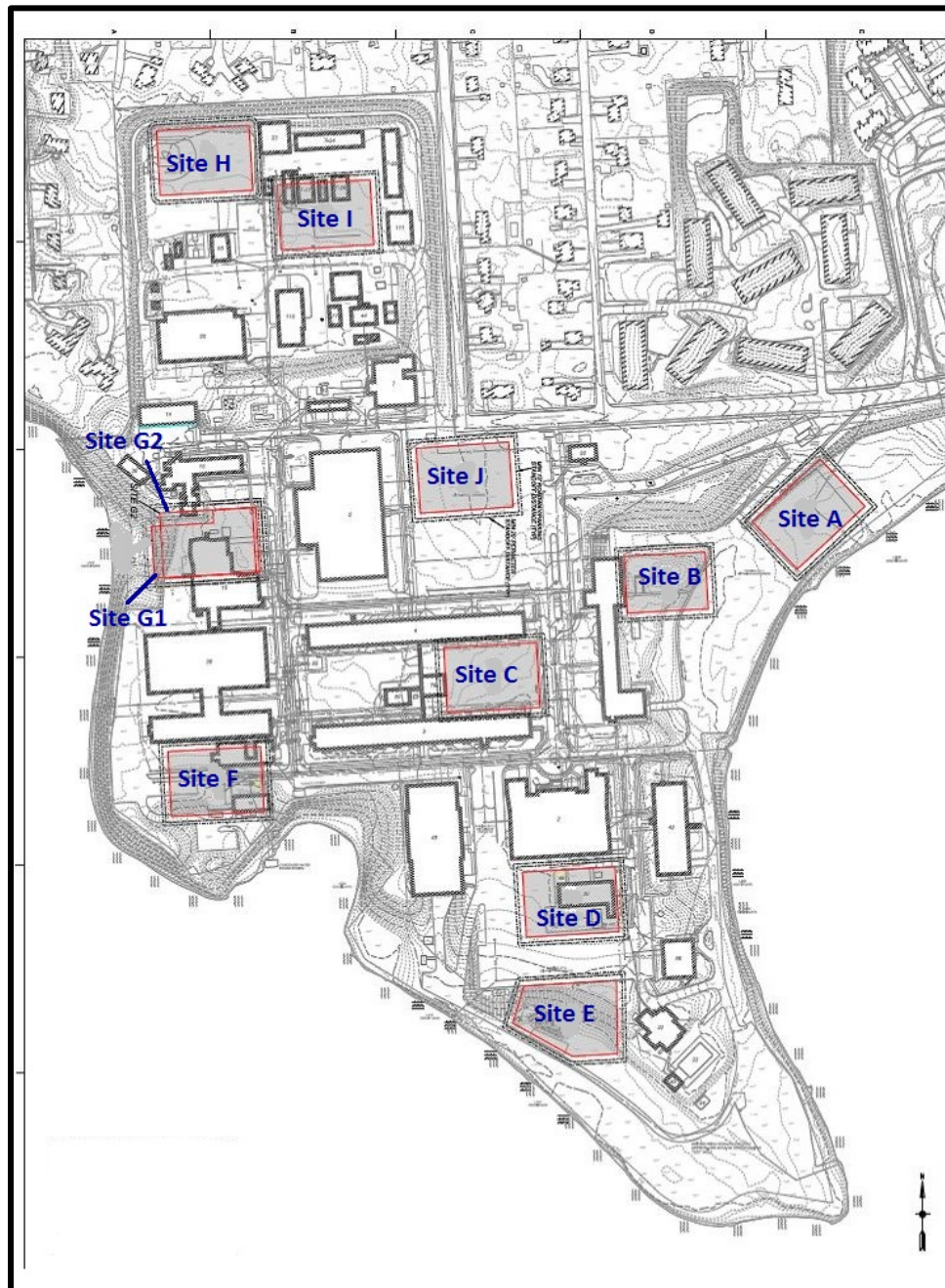


Figure 7 - Alternatives for Building Site Location on the NSSC Facility



Proposed Sites

- Site A: In parking lot C
- Site B: Behind Building 1
- Site C: Between buildings 3 & 4
- Site D: Behind Building 2
- Site E: On the point sloped area near Building 32
- Site F: Behind Building 36
- Site G1: Adjacent to Building 16 with partial demo of 16
- Site G2: Adjacent to Building 16 with partial demo of 16
- Site H: Ballfield
- Site I: Warehouse Area
- Site J: Parking Lot A

3.2.2 Replacement Parking Alternatives

The placement of the S2PRINT building results in the loss of 60 existing parking spaces. Three alternatives were evaluated to address the loss of all of the displaced parking spaces (see Figure 8 –Replacement Parking Alternative Locations). The Preferred Alternative is a combination of 3.2.2.2 Construction of Replacement Parking South of the S2PRINT Building and 3.2.2.3 Re-Striping of Parking Lot C. There were no feasible locations for replacement parking further from wetland resource areas due the level of existing development at the NSSC.

3.2.2.1 Construction of Replacement Parking North of Parking Lot C

The construction of a 23,300 square foot (0.53 acres) parking lot adjacent to Parking Lot C would add 76 new parking spaces (see Figure 9 – Parking Lot Construction North of Parking Lot C). The entire site has been previously disturbed and is vegetated with grass. The parking lot would be constructed using pervious pavement to infiltrate surface water. In addition, the replacement parking lot would be set back 40 feet from the wetland boundary of Lake Cochituate (in compliance with the Town of Natick Wetland Bylaw). Although this alternative provided an adequate number of replacement parking spaces and infiltrated surface water, the Preferred Alternative (see 3.2.2.4 Re-striping of Parking Lot C/Construction of Replacement Parking South of the S2PRINT Building) provided a reduction in the total amount of pavement and moved the parking lot further from Lake Cochituate.

3.2.2.2 Construction of Replacement Parking South of the S2PRINT Building

The construction of a 9,580 square foot (0.22 acres) parking lot south of the S2PRINT building would add 32 new parking spaces (see Figure 5 – Parking Lot Construction South of the S2PRINT Building). This site is located within a remnant of a mature forest community. Approximately half of the area (3,500 square feet) is used for parking intermittently and is currently disturbed (devoid of vegetation with a compacted soil substrate) (see Figure 3 to view disturbed area). The removal of approximately five trees; four oak (*Quercus* sp.) and one red maple (*Acer rubrum*) would be required for the parking lot construction however, this is not anticipated to affect views of natural vegetation from Lake Cochituate due to the additional trees between the parking lot and lake. The parking lot would be constructed using pervious pavement to infiltrate surface water. This parking lot would be located a distance of 50 or more feet from Lake Cochituate in compliance with the 40-foot Town of Natick Wetland Bylaw (for additional information on wetland jurisdictional boundaries see Section 4.2.3 Wetlands). This alternative also reduces the total amount of pavement by 13,720 (0.31 acres) due to its smaller size. However, this alternative does not provide enough replacement parking to maintain the current number of parking spaces at the NSSC facility. Therefore, this alternative (as a stand-alone alternative) was determined to be non-viable.

3.2.2.3 Re-Striping of Parking Lot C

The re-striping of Parking Lot C could add 33 new parking spaces. This alternative does not provide enough parking to compensate for the loss of 60 parking spaces (see Figure 4 – Re-striping of Parking Lot C). Maintaining the current number of parking spaces at the NSSC facility is necessary to accommodate the workforce. Therefore, this alternative (as a stand-alone alternative) was determined to be non-viable.

3.2.2.4 Re-striping of Parking Lot C/Construction of Replacement Parking South of the S2PRINT Building (Preferred Alternative)

The combination of both the re-striping of existing Parking Lot C (which provides an additional 33 parking spaces) and the construction of a new parking lot south of the S2PRINT building (which provides 32 parking space) provides 65 new parking spaces which provides an adequate number of replacement parking spaces. In addition, this alternative reduces the amount of pavement by 13,720 (0.31 acres) and maximizes the siting distance from Lake Cochituate. Therefore, the combination of two alternatives was determined to be the preferred alternative.

3.3 Renovation of Other Facilities at NSSC

All facilities on the NSSC facilities are fully utilized. This alternative is nonviable.

3.4 Leasing

There are no private facilities available that can be leased to meet the project objective. Hanscom Air Force Base (AFB) is 30 miles from the NSSC which would add a work commute for service personnel located in the NSSC area. In addition, there are no facilities available at Hanscom AFB to meet the project objective. This alternative is nonviable.

4.0 ENVIRONMENTAL SETTING

4.1 Physical Environment

4.1.1 Geology

The NSSC is located within the Appalachian Highlands Geologic Province along the boundary with the Atlantic Plain Geologic Province (USGS 2015a). Bedrock geology consists of Igneous and Metasedimentary rocks from the Paleozoic and Precambrian periods (USGS 2015b). Bedrock outcrops are common in the hilly areas of southern Natick although superficial deposits cover most of Natick's underlying bedrock. The dominant geologic feature of the area is stratified deposits of well compacted glacial till that occurs in the Sudbury River Watershed. These till deposits are the result of glaciers receding from the region.

The Natick area is characterized by low-elevation terrain that is generally less than 200 feet above mean sea level (msl). Elevations in Natick range from 410 feet at Pegan Hill, located in South Natick, to approximately 135 feet in wetland areas along the Charles River and at Lake Cochituate. Noteworthy topographic features of the town, starting from Pegan Hill in South Natick and moving north towards Route 9 include; Carver Hill (300 feet), Broad Hill (312 feet), Train Hill (300 feet), and Pleasant Hill (313 feet). In western Natick, Drury Hill (300 feet) is the dominant slope (Natick Soldier Systems Center 2013).

Figure 8 – Replacement Parking Alternative Locations

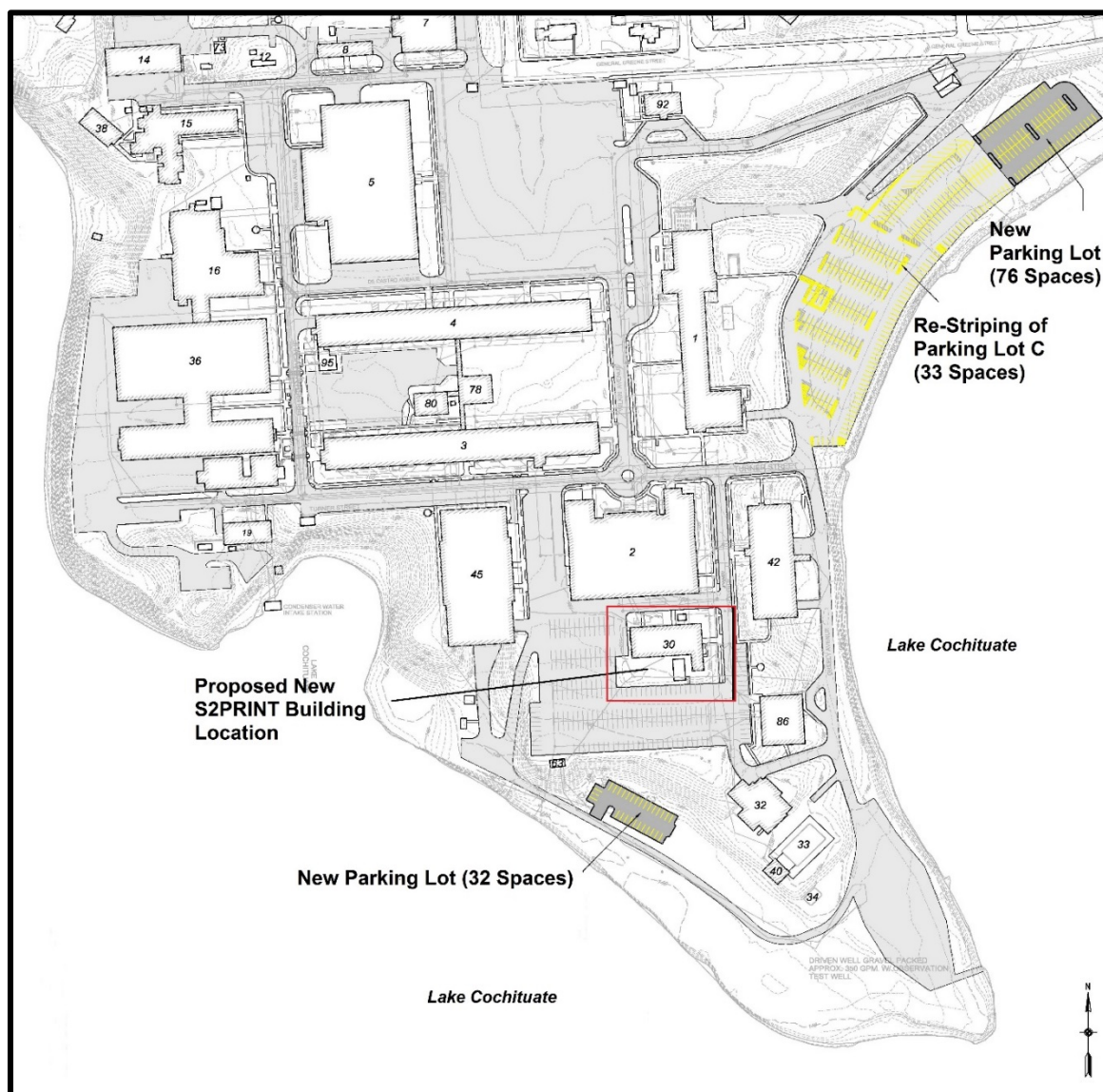
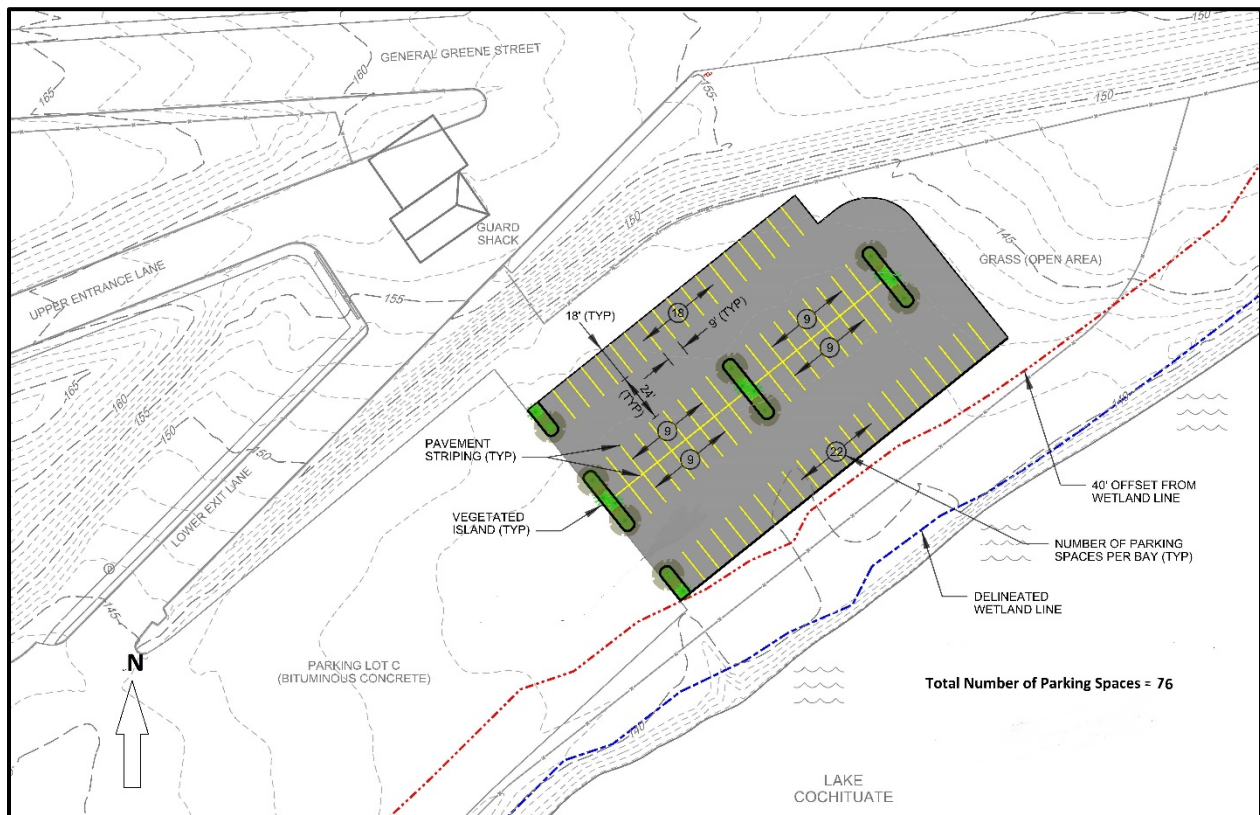


Figure 9 – Parking Lot Construction North of Parking Lot C



4.1.2 Soils

The Natural Resources Conservation Service Web Soil Survey for Middlesex County, Massachusetts indicates that the NSSC installation is located primarily on urban land, including the location of the new S2PRINT building and replacement parking. Urban land consists of areas where the soil has been altered or obscured by buildings, industrial areas, paved parking lots, sidewalks, roads and railroad yards (structures cover 75% or more of the surface area). Urban land areas in Middlesex County have slopes ranging from level to steep (USDA 2016).

The Federal Farmland Protection Policy Act (FPPA) of 1981 was enacted to minimize the extent to which federal programs contribute to the irreversible conversion of farmland to nonagricultural uses. The Act applies to farmland with soil types classified as prime, unique, or of statewide or local importance. The Deerfield series is recognized as a “Farmland of State or Local Importance” soil for agricultural purposes (NEsoil.com 2016). There is a narrow area of the Deerfield soil located along Lake Cochituate to the south and southeast of the installation

(USDA 2016). The proposed replacement parking lot located south of the S2PRINT building is partially located within urban land and partially within an area mapped as a Deerfield soil.

Soil contamination has been documented with various constituents of concern in site investigations at the NSSC installation over the last few decades. Contaminated soils were excavated and removed at the Building T-25 site in 1997, the former Gym site in the spring/summer of 2002 (north of Parking Lot C), the Building 62 and 68 site during the fall of 2005, the Boiler Plant (Building 19) site in 1990, 1995, and 2000 and the Building 14 and former Building 13 site in 2007 (U.S. Environmental Protection Agency 2015a). More detailed information about site contamination in areas affected by the S2PRINT project can be found in Section 4.1.4 *Hazardous Materials*.

4.1.3 Climate

In general, winters in Middlesex County are cold, and summers are warm. In winter, the average temperature is 28.0 degrees Fahrenheit (F) and the average daily minimum temperature is 18.5 degrees. In summer, the average temperature is 69.1 degrees and the average daily maximum temperature is 80.3 degrees. The winters are moderately cold and wet. The last killing frost generally occurs in early May, and the earliest fall frost usually comes in late September or early October. The summers are typically warm and moist with some periods of high humidity. The total annual precipitation is about 46.9 inches. Of this, about 22.6 inches, or 48 percent, usually falls in April through September. The average seasonal snowfall is about 53.2 inches. The prevailing wind is from the west-northwest with highest average wind speed of 13.9 miles per hour occurring in March. Winter storms moving northeastward along the coast frequently bring rain and thawing and then more snow and cold weather. In summer, sea breezes frequently moderate the temperature, particularly near the coast (NEsoil.com 2016).

4.1.4 Hazardous Materials

The Final Site Assessment Decision for the NSSC was completed on May 10, 1993 and the NSSC was identified as a Federal Superfund Site and placed on the U.S. Environmental Protection Agency's (USEPA) National Priority List for cleanup in 1994. A Restoration Advisory Board (RAB) was established in 1995 to review documents and provide citizen input to the restoration process (Natick Soldier Systems Center 2009). At the present time, the USEPA has determined that potential or actual human exposures are under control at this site under current conditions. The USEPA is still working in cooperation with the NSSC to determine whether contaminated groundwater migration is under control (USEPA 2015a).

The Army began an investigation of groundwater contamination at the Army Supply Well in the vicinity of Building 63 in the fall of 1997. The Army discontinued using the on-post water supply well and now contracts with the Town of Natick for potable water. The Army has found additional groundwater contamination near the wells and Buildings 45 and 2. A groundwater extraction and treatment system was installed as a pilot study and has been

operating since 1998. A Record of Decision for this remedy was signed in 2001. Concentrations of primary contaminants of concern, trichloroethene (TCE) and perchloroethylene (PCE) have been lowered from hundreds of parts per million in some areas in 1998 to 21-23 ppm in 2017 in the T-25 Area. Additional plumes were added to the remedy with an Explanation of Significant Difference (ESD) in 2013.

An *ex situ* wellhead PTS was installed in 2008 to treat 1,4-dioxane in groundwater from extraction wells EW-3 and EW-4 in the Buildings 63, 2, and 45 Area (see Figure 10 – Groundwater Contamination). This was required because 1,4-dioxane cannot be effectively removed by the carbon adsorption used in the Building 94 treatment system. This 1,4-Dioxane PTS consists of a Fenton's Reagent Advanced Oxidation Process. After 1,4- Dioxane is destroyed in the pretreatment system, the groundwater is pumped to the ground water extraction and treatment system (GWETS).

The current groundwater remedial approach at NSSC is extraction and *ex situ* treatment of impacted groundwater. Groundwater capture zone assessments have been used to evaluate the effectiveness of the GWETS in capturing the interpreted plume extents above screening criteria based on extraction well locations and operating pumping rates. In general, the models have suggested that contaminant plumes in groundwater have been completely captured at the T-25 Area and the Buildings 22 and 36 Area, and were largely captured at the Buildings 63, 2, and 45 Area. An optimization study was started in spring 2017 and will be complete by spring 2018. The optimization study will update capture zone analyses and propose a plan to ensure plume containment and evaluate corrective action alternatives to optimize the future exit/ramp-down strategy.

The proposed new S2PRINT building is located over the groundwater plume in the vicinity of Buildings 63, 45 and 2 which is contaminated with TCE (see Figure 10 – Groundwater Contamination). The highest concentration near the area proposed for the Sprint Building is 155 ug/L of TCE. The Installation performed a sub-slab vapor intrusion study for the nearby U.S. Army Research Institute of Environmental Medicine Laboratory (USARIEM) Building 42 in 2012 and determined that samples of shallow groundwater from the water table interval had no detections of TCE or PCE, and that soil vapor samples beneath the basement floor slab had very low detected concentrations of TCE and PCE below the MassDEP commercial/industrial sub-slab soil gas screening values and also below the federal USEPA-derived commercial/industrial soil gas screening levels.

Ground water is located approximately 28 feet below the ground surface elevation in the location of the S2PRINT Building. There are no Land Use Controls (LUCs) specified in the Record of Decision (ROD) by the USEPA for activities above contaminated groundwater plumes however, there is a directive that requires that exposure to contaminated groundwater be prevented. The USEPA has since published technical guidance entitled for evaluating vapor intrusion to indoor air from groundwater and soil (USEPA 2015b). Pursuant to the guidance provided, a vapor barrier will be incorporated into the S2PRINT building design to assure

occupant safety and any other measures deemed necessary to assure occupant safety. In addition, if dewatering is necessary, potentially contaminated groundwater will be handled in accordance with federal and state laws and regulations.

The Army began an extensive investigation of groundwater and soil contamination at the Former Gym Site (located north of Parking Lot C) in the fall of 1997. This investigation led to the selection of cleanup remedies for the area. An excavation of contaminated soils at the former gym site was completed in spring 2002. A report on the confirmation sampling was submitted in October 2002. An additional monitoring well was installed in 2003. The Army monitored the groundwater contamination for several additional rounds and determined the removal action was successful. Soils were also excavated at the Buildings 62 & 68 site during the fall of 2005 and included in the Former Proposed Gymnasium ROD for no further action which was signed in the fall of 2007. As such, soil contamination was not a limiting factor in potentially siting replacement parking in that location.

Tier I, II, & III Ecological Risk Assessments were performed for the sediments and surface water in Pegan Cove which indicated a risk to the benthic community and a potential for aquatic food chain exposures to occur in the sediments, but no unacceptable risk for exposures to the surface water. The Tier III concluded that concentrations of chemicals of ecological concern in fish and in the sediment-based aquatic food chain do not pose an unacceptable risk to wildlife. A human health fish consumption pathway evaluation completed in 2005 verified the Massachusetts Department of Public Health (DPH) fish consumption restriction for sensitive populations (see *Section 4.3.3 Fisheries* for fish consumption restriction advisory). Additional fish tissue studies were conducted in fall 2007. A ROD was signed in September 2009 for the removal of sediments in Pegan Cove contaminated with polychlorinated biphenyls (PCBs). The Army has removed contaminated sediment in Pegan Cove during 2010 (USEPA 2015a).

Mabbett and Associates, Inc. (Mabbett) performed surveys for suspect asbestos containing building materials (ACM) at the NSSC (NSSC 2012). A physical U.S. Environmental Protection Agency (EPA) Asbestos Hazard and Emergency Response Act (AHERA) inspection and sampling of current materials was conducted in accordance with established protocols to identify and quantify ACM in accessible areas. Site survey work was performed during December 2011 and January 2012, by appropriately credentialed Massachusetts licensed asbestos inspectors using non-destructive sampling methods. Collected suspect ACM samples were submitted to a certified analytical laboratory for asbestos analysis by polarized light microscopy (PLM) using positive stop methodology. Results from the laboratory analysis of submitted bulk samples indicated that the building materials listed below were identified as having asbestos present at concentrations equal to or greater than 1%. (Note: Massachusetts state regulations define ACM as equal to or greater than 1%). Based on field and laboratory analysis, ACM was categorized as either friable or non-friable. Friable ACM is defined by National Emission Standards for Hazardous Air Pollutants (NESHAP) as any material containing more than 1% asbestos that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. Non-friable ACM is defined by NESHAP as any material containing

more than 1% asbestos that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure (NSSC 2012).

Friable Asbestos

- Joint Compound – 2% Chrysotile
- Textured Ceiling Coating – 2% Chrysotile

Non-Friable Asbestos

- 2nd Layer Floor Tile – 5% Chrysotile
- 2nd Layer Floor Tile Mastic – 20% Chrysotile

As such, the proposed project will require asbestos abatement during demolition. The contractor will be required to comply with all applicable federal, state and local laws and regulations, and relevant Department of Defense (DoD) Policies. Additional hazardous materials surveys will be conducted prior to demolition to determine if other materials such as lead containing paint, light ballast containing PCB's, thermostats containing mercury, etc., are present. Other hazardous materials identified on-site will also be handled in accordance with all applicable federal, state and local laws and regulations, and relevant DoD policies.

Noise levels are measured in units called decibels (dB). The human ear does not respond equally to all frequencies (or pitches). Measured sound levels are often adjusted or weighted to correspond to the human perception of loudness; it is filtered to reduce the strength of very low- and high-pitched sounds. This adjusted unit is known as the A-weighted decibel, or dBA. Project noise will need to comply with MassDEP limit of 63 dBA Lmax (maximum sound level) which is typical for light industrial development.

4.1.5 Cross Boundary Issues

As part of the preparation of the 2013 NSSC Master Plan, the Massachusetts Department of Conservation and Recreation (MA DCR) and the Cochituate State Park Advisory Committee (CSPAC) voiced concern about sustaining the long-term conservation and public recreation attributes of the Cochituate State Park. The CSPAC stressed the importance of maintaining visual buffers for lake users looking from the lake towards the NSSC facility at several meetings with NSSC personnel. The new S2PRINT building will be a three-story building. To the east of the S2PRINT building is the U.S. Army Research Institute of Environmental Medicine Laboratory (USARIEM) (Building 42) which is a five-story building. While the ground floor of the USARIEM is built at a lower elevation, the remaining four floors are located at or above the elevation of the S2PRINT building. The USARIEM building is not visible from Lake Cochituate looking towards the installation from Pegan Cove or from Lake Cochituate according to photographs taken from Lake Cochituate as part of a viewshed evaluation conducted during the preparation of the 2013 Master Plan. The replacement parking area will be setback 50 to 90 feet from the lake. No effects to views of the NSSC Installation from Cochituate Lake are anticipated as a result of the removal of some trees because remaining

trees will provide an adequate vegetated buffer.

Construction of the proposed project could cause a temporary increase in construction related noise and a reduction in local ambient air quality because of fugitive dust and emissions generated by construction equipment. The extent of dust generated would depend on the level of construction activity and dryness. Proper dust suppression techniques would be employed to avoid creating a nuisance for nearby residents during dry and windy weather. The proposed S2PRINT building project is located in the interior portion of the main campus and therefore, cross boundary issues are not expected to occur.

4.2 Water Resources

4.2.1 Surface Water

Natick is divided between the Charles River Watershed in the eastern and southern portions of town, and the Concord River Watershed in the west and north. The Lake Cochituate Watershed covers approximately 17 square miles in the towns of Ashland, Framingham, Natick, Sherborn, and Wayland in Middlesex County. Water bodies and associated wetlands cover about 13.5% of the total area of the Town of Natick. Land use within the watershed consists of residential, industrial and urban. Lake Cochituate State Park owns a small margin of land surrounding the majority of the lake.

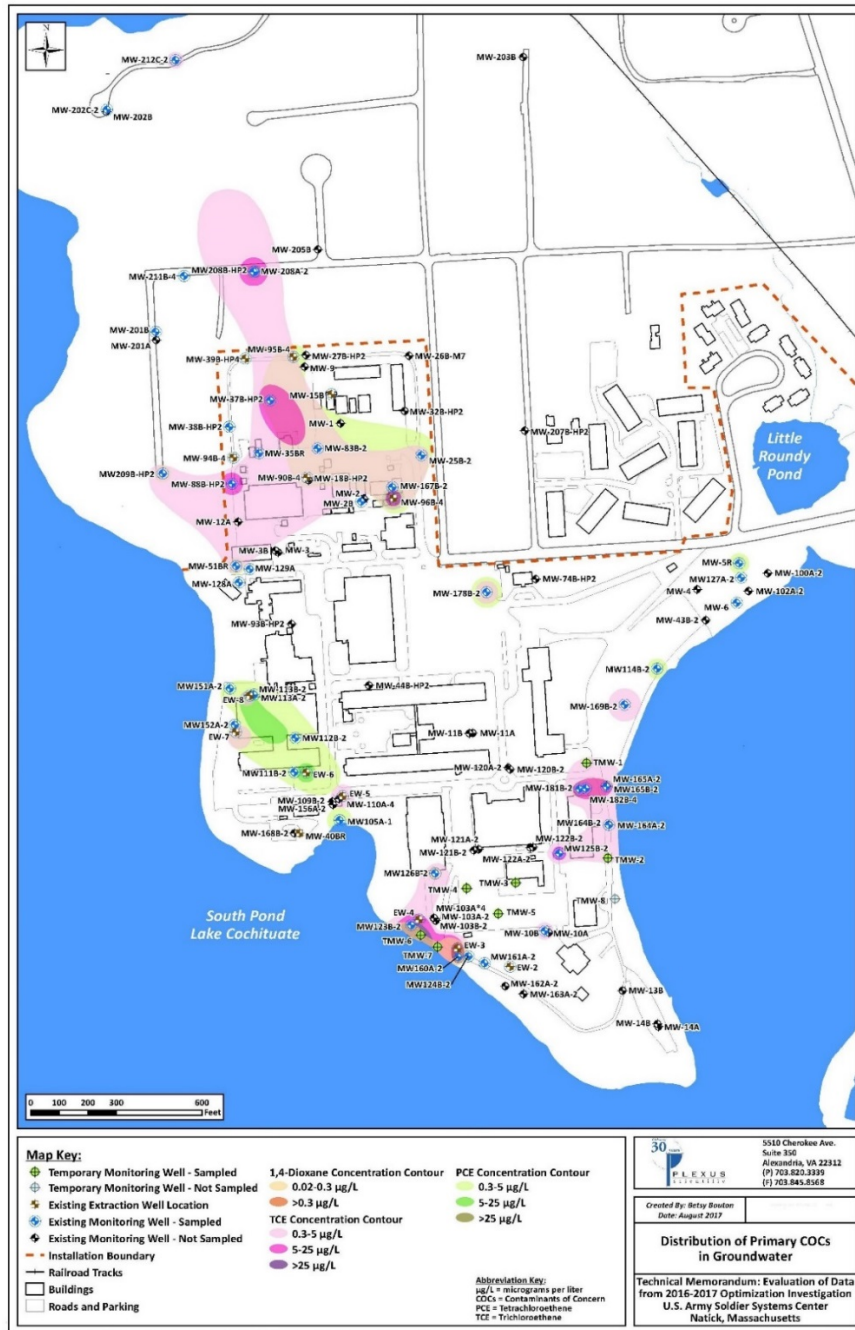
The NSSC Main Campus is located adjacent to Lake Cochituate which has a surface area of 625 acres and a depth of 65.6 feet at its deepest point. Cochituate Brook, the outlet for Lake Cochituate, located in Framingham, flows approximately 0.6 miles into the Sudbury River, which merges with the Assabet River approximately 16 miles downstream to form the Concord River. The Concord River flows into the Merrimack River, which discharges into the Atlantic Ocean approximately 37 miles downstream.

The Tier I, II and III Ecological Risk Assessments, completed in 2009, indicate that it is safe for adults and children to swim, wade, and boat along the NSSC shoreline; and the ecological risks due to contamination from the NSSC-associated sediment are negligible for bird and mammal species. The studies found that the potential risk to eating fish caught near the NSSC shoreline are slightly higher than the USEPA acceptable range which prompted a cleanup plan to be implemented in 2010 for PCB contaminated sediments in Pegan Cove (Natick Soldier Systems Center 2010a). The residual risk to the public from fish consumption is based on mercury contamination that is not related to NSSC contaminants but is endemic to lakes in Eastern Massachusetts. The area is posted by the lake's owner, the Commonwealth of Massachusetts Department of Conservation and Recreation, who perform public education activities as required.

An USEPA National Pollution Discharge Elimination System (NPDES) permit provides authorization for a municipality or public entity to discharge surface waters through a MS4

permit. Each regulated MS4 entity is required to develop and implement a stormwater management program (SWMP) to reduce the contamination of stormwater runoff and prohibit illicit discharges. The NSSC provides annual reports to the USEPA with regard to its Phase II Small MS4 General Permit which was issued on 2003 and is now in its thirteenth year (Permit

Figure 10 – Groundwater Contamination



Number MAR042008) (USEPA 2016a.). The annual report for Permit Year 13 (Reporting Period April 1, 2015 to March 31, 2016) demonstrated a number of initiatives for stormwater improvements and outlined progress and activities planned for the future (USEPA 2016a). Future stormwater improvements include the use of pervious pavement, bioretention areas and bioswales. The construction of a rain garden is proposed along the south side of Building 42. Without stormwater improvements, there is an increased risk to water quality due to more runoff towards the lake under the post construction condition.

USEPA Region 1 issued the General Permit for stormwater discharges from Small Municipal Separate Storm Sewer Systems (MS4s) on May 1, 2003. The 2016 Massachusetts Small MS4 General Permit was signed April 4, 2016 and will become effective July 1, 2018. This permit reflects modifications to the 2014 draft small MS4 general permit released for comment on September 30, 2014 and replaces the 2003 small MS4 general permit for MS4 operators within the Commonwealth of Massachusetts. The NSSC facility is located within the Merrimack and South Coastal watersheds of Massachusetts permit area. The 2016 Small Generator Permit requires Small MS4s operators to continue to implement the Stormwater Management Programs required by the previous permit and to incorporate additional applicable requirements as will be outlined in the final permit (US Environmental Protection Agency 2016b).

The existing Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel 25017C0536F (dated July 7, 2014) covers the NSSC property. The FIRM Panel (Number 536 of 859) shows portions of the NSSC property categorized as Zone A which is defined as an area with a 1% chance of flooding annually. There is no base flood elevation associated with this designation. Both proposed parking lot construction alternatives are located within the designated floodplain (see Figure 11 – Natick Soldier Systems Center Zone A Floodplain). See Section 6.3 Floodplain Management for additional information and discussion pursuant to Executive Order No. 11988 which requires Federal agencies to evaluate the potential effects of any actions which may take place within floodplains.

4.2.2 Groundwater

The Town of Natick drinking water supply is derived from aquifers and reservoirs in the surrounding region. The public water supply system consists of two reservoirs, 10 wells, and a distribution of water mains located throughout Natick. The unconsolidated aquifer in Natick is composed of moderately well sorted silty sands, sandy silts, and silty clays that lie beneath poorly, sorted, coarse to fine-grained sands (Natick Soldier Systems Center 2004). The NSSC facility is located approximately 2,500 feet southeast of the Town of Natick's Springvale Municipal Water Supply Well Field (Springvale Well Field). The ground water beneath the entire NSSC facility has been designated as a Zone II for the Town of Natick Springvale Municipal Well System (Natick Soldier Systems Center 2007).

As stated previously, the NSSC was added to the USEPA National Priority List in 1994. A ROD was signed in 2001 which included a cooperative agreement between the Army and the Town of Natick for a one-time grant of \$3.1 million to the town to construct and operate the municipal Springvale Water Treatment Plant. The 2001 ROD prohibited all on-post use of groundwater that would cause ingestion and/or dermal exposure to contaminated groundwater. This was implemented in part by contracting for potable water from the Town of Natick and also by prohibiting any new projects on post that involve the use of groundwater at the NSSC.

The new S2PRINT building connection to the domestic water system shall be made to an existing 6 inch water line and will be made to the 10 inch NSSC installation fire water line for facility fire suppression systems and fire hydrant connections. In addition, groundwater is contaminated with trichloroethene (TCE), approximately 28 feet below the ground surface elevation, in the location of the new S2PRINT building. More detailed information about site contamination in areas affected by the S2PRINT project can be found in Section 4.1.4 *Hazardous Materials*.

4.2.3 Wetlands

Wetlands in the vicinity of the NSSC installation are generally associated with surface water bodies (streams, lakes and ponds) due to urban/suburban development in the Natick area. Wetlands in the NSSC main campus area are limited to a narrow area along the periphery of Lake Cochituate due to an abrupt change in topography (see Figure 12 – 2012 Wetland Delineation).

Figure 11 – Natick Soldier Systems Center Zone A Floodplain



Riparian vegetation along the periphery of Lake Cochituate is characterized by a mixture of trees, shrubs and herbs. The overstory is composed primarily of red oak (*Quercus rubra*), white pine (*Pinus strobus*), and red maple (*Acer rubrum*). Shrubs found in the area includes high bush blueberry (*Vaccinium corymbosum*), sweet pepperbush (*Clethra alnifolia*) and azalea (*Rhododendron viscosum*) along with saplings of common trees species. Herbaceous plants included Kentucky blue grass (*Poa pratensis*), lesser poverty rush (*Juncus tenuis*), lamp rush (*Juncus effusus*), smartweed (*Polygonum* sp.), clover (*Trifolium* sp.), and great plantain (*Plantago major*). There are no vernal pools found on the installation. Vernal pools are depressions or low areas that contain water for only part of the year that serve as breeding habitat for amphibian species.

Under the Massachusetts Wetland Protection Act (WPA), town Conservation Commissions have the discretionary authority to determine if resource areas within its jurisdiction (100 foot wetland buffer zone) are being protected, to regulate work in these areas, and to enforce the wetlands regulations. In addition, the Town of Natick has local bylaw regulations which includes a No Disturbance Zone; that are lands within 25 feet of wetlands, and an additional No Build Zone that are lands within 15 feet of any No Disturbance Zone (a total of 40 feet). The protection of wetland resources is an important component of the NSSC project planning and as such, as a matter of comity, the NSSC coordinates with the local Conservation Commission for construction activities within 100 feet of a vegetated wetland and complies with the Natick local bylaw regulations in as much as possible.

4.3 Biological Resources

4.3.1 Terrestrial Habitat

The project area terrestrial habitat has been highly modified by anthropomorphic development; campus grounds are primarily landscaped with specimen trees and shrubs. A forested area located in the southern most portion of the peninsula composed primarily of mature red oak represents a remnant of former native woodlands.

The proposed S2PRINT building construction and replacement parking will require the removal of a total of nine trees. One Norway maple (*Acer platanoides*) and three flowering crabapples (*Malus* sp.), located in the S2PRINT building footprint, will need to be removed. The project also involves the construction of replacement parking south of the S2PRINT Building. Approximately half of the area (3,500 square feet) is currently disturbed however, approximately five trees; four oak (*Quercus* sp.) and one red maple (*Acer rubrum*) will need to be removed within the footprint of the proposed parking lot.

Non-native invasive plants on the main campus include trees, shrubs, herbs, and vines that have been introduced to the area and have the capability to flourish in the nonnative environment through the lack of natural controls, the ability for prolific growth or rapid reproductive capabilities. Some of the nonnative species found on the NSSC installation include such as honeysuckle (*Lonicera* sp.) and Norway maple. Invasive plants are among the greatest threats to the integrity of natural areas. They disrupt the natural ecosystem by displacing more diverse and valuable plant communities.

The Department of Army Sustainable Design and Development Policy Update dated 17 January 2017 requires that any existing invasive plants be removed from the project site and destroyed or disposed of in an authorized landfill and invasive plants will not be planted on the project site in accordance with the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 189.1-2014 Standard for the Design of High-Performance Green Buildings. A large Norway maple, as previously mentioned, will be removed as part of the project building plan.

4.3.2 Wildlife

Mammalian species found in the project area are those tolerant of human disturbance such as white-tailed deer (*Odocoileus virginiana*) raccoon (*Procyon lotor*), skunk (*Mephitis mephitis*), gray squirrel (*Sciurus carolinensis*), red fox (*Vulpes vulpes*), opossum (*Didelphis marsupialis*), and moles. Birds such as sparrows, northern cardinal (*Cardinalis cardinalis*), hawks, ducks and geese, herons, and ring-necked pheasant (*Phasianus colchicus*) have been known to inhabit the area. In addition, reptiles and amphibians present include frogs, salamanders, and snakes.

4.3.3 Fisheries

Lake Cochituate supports a variety of fresh water species, including carp (*Cyprinus carpio*), bass (*Micropterus* sp.), perch (*Perca flavescens*), bluegill (*Lepomis macrochirus*) and pickerel (*Esox niger*). Periodically, the Massachusetts Division of Fisheries and Wildlife stock the lake with trout (MA Department of Fish and Wildlife 2011). The Massachusetts Department of Public Health (DPH) has a Freshwater Fish Consumption Advisory List (October 2016) for Lake Cochituate. Children younger than 12 years or age, pregnant women, women of childbearing age who may become pregnant, and nursing mothers should not eat any fish from Lake Cochituate due to a polychlorinated biphenyls (PCBs) hazard. In addition, due to a PCB hazard, the general public should not consume any American eel (*Anguilla rostrata*) caught in Lake Cochituate (MA DPH 2016).

4.4 Endangered and Threatened Species

4.4.1 Federal

The northern long-eared bat (*Myotis septentrionalis*) (NLEB) was listed as a federally threatened species by the U.S. Fish and Wildlife Service (USFWS) (April 2, 2015). This listing took effect on May 4, 2015. Increased mortality of the bat caused by white-nose syndrome, an infectious wildlife disease that poses considerable threats to hibernating bat species, has been the primary contributor to a significant decline in the population of the NLEB since 2007 (USFWS 2015a). The NLEB was once widespread throughout New England, but due to white-nose syndrome, the population in New England has declined by at least 90 percent (USFWS 2015b.)

In addition to listing the northern long-eared bat as a threatened species, the USFWS issued an interim 4(d) rule which prohibits incidental take (an action that is not intended to take a species but may still result in incidental harmful effects on the species) with some limited exceptions provided the activities protect known maternity roosts and hibernacula (USFWS 2015c).

Suitable summer habitat for the NLEB consists of a wide variety of forested/wooded habitats where the bats roost, forage, and travel and have also been observed roosting in human-made structures, such as buildings, barns and sheds. Bats roost singly or in colonies underneath bark, in cavities, or in crevices of both live and dead trees. Individual trees may be considered suitable habitat when they exhibit the characteristics of a potential roost tree and are located within 1,000 feet of other forested/wooded habitat. Females give birth between late May to late July and roost in maternity colonies composed of approximately 30 to 60 bats. In winter, the NLEB hibernates in caves and mines, called a hibernacula.

Approximately 20 acres of linear forested habitat is associated with the riparian area adjacent to Little Roundy Pond and Lake Cochituate and approximately 4 acres of forest habitat is located at the southern-most portion of the peninsula on the NSSC main campus. The USFWS lists the NLEB as being present in Massachusetts and therefore, it was assumed that the NLEB could utilize mature trees within adjacent forest habitat for roosting.

To determine the presence or absence of the NLEB on the NSSC property, Bat Conservation and Management (Project Principal John Cheng), acting on behalf of the NSSC, deployed passive acoustic monitoring devices on the 78-acre NSSC property during the summer of 2016 (from June 16th to August 18th 2016). The survey comprised four acoustic sites adventitiously sited to detect the highest potential of bat echolocation calls within the NSSC facility. The purpose of the survey was to make full spectrum recordings of bat echolocation calls during the summer maternity season when pregnant/lactating females and their pups are most active and most likely to be encountered.

The four acoustic monitoring sites resulted in a combined total of 248 monitoring nights, yielding a total of 28,416 confirmed bat passes. Utilizing an acoustic software program with auto classification followed by manual analysis by an expert acoustic bat analyst, a total of six bat species were confirmed at NSSC during summer 2016. The following species can be considered to be present: the big brown bat (*Eptesicus fuscus*), the silver-haired bat

(*Lasionycteris noctivagans*), the eastern red bat (*Lasiurus borealis*), the hoary bat (*Lasiurus cinereus*), and the tri-colored bat (*Perimyotis subflavus* [formerly *Pipistrellus subflavus*]).

Ten recordings collected from three of the four monitoring sites were classified as belonging to *Myotis* species, but upon manual review they were all ambiguous and none could be confirmed as evidence of NLEB occupancy. The limitations of current acoustic monitoring technology attribute these calls to either the Indiana bat (*Myotis sodalis*) and/or little brown bat (*Myotis lucifugus*). Considering the Indiana Bat is not listed by the USFWS as being present in Massachusetts, the NSSC attributes these ambiguous calls to the little brown bat.

Based upon the 2016 survey, the NSSC has determined that the NLEB is currently absent from the NSSC property. In addition, the Massachusetts Natural Heritage and Endangered Species Program (NHESP) determined that there are no known winter hibernacula within 0.25 miles or known maternity roost trees within a 150 foot radius of the NCCS property in an email dated 14 March 2016 (NHESP 2016). As such, the NSSC has determined that the S2PRINT project (e.g., tree cutting within the building and replacement parking footprint) will have no effect on the NLEB. There is little likelihood that the population will rebound sufficiently to repopulate or form a maternity colony in the area in the near-term since there is no evidence of their presence now. Survey results are considered valid for a period of five years (September 2017 to August 2022) (USFWS 2017a). In accordance with the USFWS consultation website, there are no other federally endangered or threatened species in Natick, Middlesex County (USFWS 2017b). No further coordination under the Endangered Species Act is required within that timeframe.

4.4.2. State

In accordance with the Massachusetts Natural Heritage Atlas 14th Edition (Effective August 1, 2017), no Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife are designated in the NSSC property or vicinity by the Massachusetts Natural Heritage and Endangered Species Program (NHESP 2017). Therefore, no impacts to state listed rare species will occur as a result of the AFH demolition and construction project.

Figure 12 – 2012 Wetland Delineation



4.5 Socio-Economic Resources

As of the 2010 census, there were 32,786 people, 13,327 households, and 8,654 families residing in the town of Natick. Of the 13,327 households in Natick, 64.9% were family households (with children) and 35.1 were non-family households. The average household size was 2.4 and the average family size was 3.1. The racial makeup of the town was 87.3% White, 2.1% African American, 0.1% Native American, 7.2% Asian, 0.0% Pacific Islander, 3.0% Hispanic or Latino, 1.2% from other races, and 2.0% from two or more races. Of the town population, 48.1% were male and 51.9% were female; 6.7% were under 5 years, 18.6% were 5 years to 19 years, 60.8% were 20 to 64 years and 14.0% were over 65 years (U.S. Census Bureau 2015a).

In 2013 inflation-adjusted dollars, the median household income for the town of Natick was \$95,328, the median family was \$121,712 and the per capita income was \$50,239. Approximately 2.1% of families and 4.3% of the population were below the poverty level (U.S. Census Bureau 2015b). Natick is largely a middle class suburban town with some areas of semi-rural affluence.

The NSSC has over 120 buildings located on 174 acres in the Town of Natick and neighboring communities. The main campus is 78 acres. Based upon January 2012 population information, the NSSC has a total workforce of 1,698 (NSSC 2013).

4.6 Historic and Archaeological Resources

The 1997 Cultural Resource Management Plan (CRMP) identified five archaeologically sensitive acres within the NSSC facility (U.S. Army Corps of Engineers, New England District, 1997). These sensitive areas consisted of undeveloped land bordering Lake Cochituate in the southeastern tip and southwestern edge of the facility. The 1997 CRMP recommended that an intensive archaeological survey be conducted in these sensitive areas to locate, identify, and assess the presence of any undocumented sites.

The 2009 intensive archaeological survey (Banister et al. 2009) identified three previously undocumented pre-contact Native American archaeological sites designated NSSC Site Locus 1, Locus 2, and Locus 3. Locus 1 was identified in the southwest part of the facility, and Locus 2 and Locus 3 were identified to the southeast in undeveloped wooded areas adjacent to existing parking lots, drives, and buildings. All three site areas yielded chipping debris, the byproducts of Native American stone tool-making, and Locus 1 and Locus 3 also contained chipped stone tool artifacts. Of the three, Locus 1 and Locus 3 were considered potentially significant archaeological resources, under Criterion D of the National Register of Historic Places (National Register). Locus 2 was not considered a significant archaeological site and no further work was recommended.

The 2010 site examination investigations were conducted for the NSSC Site Locus 1 and Site Locus 3 to determine their significance and National Register eligibility. Based on the recovered cultural material assemblages, Locus 1 and Locus 3 were interpreted as areas where chipped stone tool manufacture and maintenance were the primary on-site activities. Because of their limited information content, neither site was determined to be eligible for the National Register and no further archaeological investigations for the NSSC facility were recommended.

The NSSC facility contains one historic district with thirteen individual contributing resources and 25 non-contributing individual resources (Figure 13 - Quartermaster Research and Development Center). The facility was determined eligible for the National Register in 2007 in consultation with the Massachusetts State Historic Preservation Officer (MA SHPO).

The Quartermaster Research and Development Center (QRDC) Historic District encompasses approximately 30 of the facility's 78 acres. The QRDC has unique historical significance because of its historical associations with the Cold War (1946 – 1989) and as a preserved example of a Cold War military research complex and is eligible for the National Register under Criteria A and C at the national level. Under Criterion A, the QRDC Historic District illustrates the Army's historic and current response to the need to develop measured scientific responses in the form of clothing, food, and equipment for use in fighting global wars. Under Criterion C, the historic district represents a state-of-the-art architectural response to a host of exotic needs such as the testing and disposal of toxic chemicals and the ability to grow fungi, molds, and food bacteria. The Ballinger Company's design for the original buildings within the complex provides especially strong support systems to hold a changing variety of test equipment housed within a community of functional, sleek, and modern buildings of the International Style. The facility retains a high degree of integrity in location, design, setting, materials, feeling, workmanship, and association (Griffin, Nolte and Steinback 2001).

The contributing resources are as follows:

Building 1, the Administration Building (now known as Carney Hall)

Building 2, the Doriot Climatic Chambers

Building 3, the Research Building (now referred to as MacGillivray Hall)

Building 4, the Development Building (now MacArthur Hall)

Building 5, the Technology Engineering Building (now referred to as the Whittlesey Building)

Building 7, the Special Test Building (now referred to as the Prendergast Building or the U.S. Navy Clothing and Textile Research Facility)

Building 8, the Hazardous Research Building (now referred to as the Nee Building)
Building 15, the Enlisted Men's Barracks (now known as the Johnson Barracks and Dining Facility)
Building 16, the Radiation Laboratory (now the Beaudoin Building)
Building 19, the Boiler Pump House
Building 36, the Engineering Laboratory (now called the Department of Defense Combat Feeding Program Building or Bainbridge Building)
Building 42, the U.S. Army Research Institute of Environmental Medicine Laboratory (USARIEM, also known as the Wood Building)
Building 71, the Central Flag Pole

One historic building has been demolished, Building 6, the Guard House. The Guard House was a contributing resource within the QRDC Historic District. This property was demolished in 2008, and replaced with a new pre-fabricated structure that met Force Protection/Anti-terrorism requirements. Photographic documentation of the original guard house was completed and accepted by the MA SHPO prior to demolition.

An Integrated Cultural Management Plan (ICRMP) was completed in 2012 (PAL Inc. et al). The ICRMP details the actions needed when working in the QRDC Historic District. Photographic documentation was also completed in 2012. This ensures that the existing condition of the QRDC Historic District structures are documented prior to any actions or construction activities are conducted.

The proposed S2PRINT building will be constructed outside of but directly adjacent to the QRDC Historic District.

Figure 13 – Quartermaster Research and Development Center Historic District



5.0 ENVIRONMENTAL IMPACTS

5.1 Physical Environment

5.1.1 Soils

The Federal Farmland Protection Policy Act (FPPA) of 1981 was enacted to minimize the extent to which federal programs contribute to the irreversible conversion of farmland to nonagricultural uses. The proposed replacement parking lot proposed to be constructed south of the S2PRINT building is located partially within an area of Deerfield soil. The Deerfield series is recognized as a “Farmland of State or Local Importance” soil for agricultural purposes (NEsoil.com 2016). However, the NSSC installation is located primarily on urban land. Urban land consists of areas where the soil has been altered or obscured by buildings, industrial areas, paved parking lots, sidewalks, roads and railroad yards (structures cover 75% or more of the surface area) (USDA 2016). The NSSC installation meets an exemption for urban land defined as having a structure density of 30 or more per 40 acres (or a minimum of 1.33 structures per acre). The NSSC has over 120 buildings located on 174 acre which is 1.45 structures per acre. Therefore, the FPPA does not apply.

5.1.2 Hazardous Materials

The NSSC was identified as a Federal Superfund Site and placed on the U.S. Environmental Protection Agency’s (USEPA) National Priority List for cleanup in 1994. The proposed new S2PRINT building is located over a groundwater plume in the vicinity of Building 63, 45 and 2 (see Figure 10 – Groundwater Contamination) which is contaminated with trichloroethene (TCE). Contaminated water is being treated at the T-25 area treatment plant. Additional well head treatment was implemented in August 2008 to treat a contaminant that is not treated by the treatment plant.

A vapor barrier, comprised of a low-permeability membrane, will be installed between the soil and the building during construction. The Installation performed a sub slab vapor intrusion study for the nearby ARIEM Building 42 in 2012 and determined that samples of shallow groundwater from the water table interval had no detections of TCE or PCE, and that soil vapor samples beneath the basement floor slab had very low detected concentrations of TCE and PCE below the MassDEP commercial/industrial sub-slab soil gas screening values and also below the federal USEPA-derived commercial/industrial soil gas screening levels. It is anticipated that a vapor barrier will be sufficient to prevent vapor intrusion into the new building assuring safe occupancy. Additional measures (e.g., installation of an Active Depressurization Technologies [ADT] system) will be installed as determined to be necessary during post construction monitoring. In addition, construction dewatering, if necessary, will be handled in accordance with applicable federal and state regulations.

Mabbett and Associates, Inc. (NSSC 2012) performed surveys for suspect asbestos containing building materials (ACM) at the NSSC. Results from the laboratory analysis indicated that both friable (joint compound, textured ceiling coating) and non-friable (second layer floor tile and floor tile) ACM are present (NSSC 2012). As such, the proposed project will require the abatement of ACM during the demolition of non-structural architectural elements and finishes. Any suspect material encountered during demolition that has not been identified as being non-ACM will be assumed to be ACM unless sample results prove otherwise. The contractor will be required to comply with all applicable federal, state and local laws and regulations and relevant Department of Defense (DoD) policies.

Additional hazardous materials surveys will be conducted prior to construction to determine if other hazardous materials, such as lead containing paint, light ballast containing Polychlorinated Biphenyl's (PCBs), thermostats containing mercury, etc., are present. Other hazardous materials identified on-site will also be handled in accordance with all applicable federal, state and local laws and regulations and relevant DoD policies. In addition, waste and inefficiency will be limited during construction by sorting and recycling demolition and construction waste, reuse of on-site materials and monitoring of material use and packaging.

Other environmental compliance requirements for the S2PRINT building and parking lot construction projects would include sediment erosion control measures implemented to prevent runoff into catch basins or adjacent wetlands and water bodies during construction activities. In addition, to minimize the potential for cross boundary annoyances, proper dust suppression techniques and applicable provisions to minimize noise should be employed during construction activities. The nearest abutter residential abutter is more than 500 feet away. Construction specification will include noise limits, work hour and equipment restrictions. Construction will take place during the daytime and the contractor will be encouraged to work as quietly as possible using hands if possible. Construction related noise is expected to be well below the MassDEP limit of 63 dBA Lmax (maximum sound level) which is typical for light industrial development. Construction activities will be temporary and conducted with the use of proper provision to minimize runoff, dust and noise.

5.1.3 Cross Boundary Issues

The construction limit of work for the S2PRINT building encompasses approximately 44,500 square feet of which 35,000 square feet are existing impervious surfaces (e.g., parking lot, building, walkways). One Norway maple tree, located within the footprint of the new building, will be removed as part of the project. The new S2PRINT building location is on the interior of the NSSC campus. In addition, the new building will be of similar height to the adjacent Doriot Climatic Chamber (Building 2) which is not visible from Lake Cochituate. As well, replacement parking, approximately 9,580 square feet in size, will be constructed in an area south of the new S2PRINT building in a partially disturbed area. Approximately half of the area (3,500 square feet) is already disturbed (devoid of vegetation) and is used for parking intermittently. The removal of approximately five trees to accommodate parking lot construction

is not expected to affect the visual buffer from Lake Cochituate. These trees are located 90 feet or more from the lake and there are additional mature trees between the lake and the proposed parking area which create a natural buffer. Therefore, impacts to the long-term conservation and public recreation attributes of Cochituate State Park are not expected as a result of this project.

Construction of the proposed project could cause a temporary increase in construction related noise and a reduction in local ambient air quality because of fugitive dust and emissions generated by construction equipment. The extent of dust generated would depend on the level of construction activity and dryness. Proper dust suppression techniques would be employed to avoid creating a nuisance during dry and windy weather. Keeping disturbed surfaces moist during windy periods is an effective control measure as well as keeping disturbed areas as small as possible and by stabilizing and protecting them as soon as possible. The proposed S2PRINT building project is located in the interior portion of the main campus and therefore, cross boundary issues are not expected to occur.

5.2 Water Resources

The NSSC was added to the USEPA National Priority List in 1994. Groundwater contamination from the T-25 area, the Buildings 63, 2, and 45 Area and the Building 22 Site plume is currently being treated at the T-25 Treatment Area. Groundwater cleanup action at the NRRC installation is estimated to continue into the 2030's.

The NSSC was required by the 2001 ROD to prohibit all on-post use of groundwater that would cause ingestion and/or dermal exposure to contaminate groundwater. This was implemented by continuing to contract with the Town of Natick for potable water. In addition, the contractor will be required to avoid damaging existing monitoring wells and appurtenant structures related to groundwater monitoring.

Sediment erosion control techniques will be implemented to prevent runoff into adjacent water bodies during construction activities. No impacts to water resources are anticipated as a result of the S2PRINT building demolition and construction project.

See Section 6.3 Floodplain Management for a discussion of impacts in the floodplain.

5.3 Biological Resources

No negative long-term impacts to biological resources will occur as a result of S2PRINT building demolition and construction project and use of parcels of land and new structures. The majority of the NSSC installation has been developed and the new S2PRINT building will be built within the existing footprint of a currently developed area. Approximately half of the area where replacement parking will be constructed has been previously disturbed.

The current level of development on the site limits the suitability of site to common species generally tolerant of human interaction. Four trees within the S2PRINT building footprint or close vicinity will be removed as part of the project; a Norway maple and three flowering crabapple and five trees will need to be removed for the parking lot construction; four oaks and a red maple. During construction activities, there may be some disruption of nesting and foraging behaviors in birds and wildlife may be temporarily displaced due to construction related disturbance (e.g., noise). The use of sediment erosion control techniques, the quick restoration of disturbed areas and the use of native species for landscaping will minimize these temporary impacts to biological resources. Once construction activities are complete, wildlife common to the area will reutilize suitable habitat in and around the construction areas. The temporary displacement of wildlife during construction is not expected to be significant as the wildlife in this area is highly adaptable to human disturbance.

5.4 Endangered and Threatened Species

5.4.1 Federal

The northern long-eared bat (*Myotis septentrionalis*) (NLEB) was recently listed as a federally threatened species by the U.S. Fish and Wildlife Service (April 2, 2015) and is listed as being present throughout the state of Massachusetts. The NSSC has determined that the NLEB is currently absent from the NSSC property based upon an acoustic survey conducted on the NSSC property during the summer of 2016. In addition, the Massachusetts Natural Heritage and Endangered Species Program (NHESP) determined that there are no known winter hibernacula within 0.25 miles or known maternity roost trees within a 150 foot radius of the NCCS property in an email dated 14 March 2016 (NHESP 2016). As such, the NSSC has determined that the S2PRINT project (e.g., tree cutting within the building and replacement parking footprint) will have “No Effect” on the NLEB.

5.4.2 State

In accordance with the Massachusetts Natural Heritage Atlas 14th Edition (Effective August 1, 2017), no Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife are designated in the NSSC property or vicinity by the Massachusetts Natural Heritage and Endangered Species Program (NHESP 2017). Therefore, no impacts to state listed rare species will occur as a result of the AFH demolition and construction project.

5.5 Socio-Economic Resources

The implementation of the S2PRINT building demolition/construction and parking replacement project is expected to have positive socio-economic benefits for the NSSC workforce. The project incorporates the Research Development Engineering Command need for advanced physiological and technological capabilities required to achieve the mission objectives.

This project would also create short-term business in the local construction industry. Another benefit is that as construction employees utilize local businesses and as such, more short-term revenue is generated in the local community.

5.6 Historic and Archaeological Resources

The primary effect of the proposed S2PRINT building to the QRDC Historic District will be visual since it will be constructed directly adjacent, but not in the historic district. Whether the effect is adverse or not is not known at this time as there is not yet a design for the proposed building. Coordination with the MA SHPO has been initiated, but cannot be concluded until a building design is available. Construction cannot begin until the coordination is complete.

6.0 OTHER COMPLIANCE REQUIREMENTS

6.1 Environmental Justice

Executive Order 12898 directs Federal agencies to identify and address disproportionately high and adverse human health or environmental effects of an agency's programs, policies, and activities on minority populations and low-income populations. The proposed project is not expected to pose impacts upon any minority or low-income neighborhoods adjacent to or in the vicinity of the project pursuant to Executive Order No. 12898. The proposed S2PRINT project will be located on the existing U.S. Army property in Natick, MA. Therefore, no disproportionately high and adverse impacts specific to any minority or low-income neighborhood would occur as a result of the proposed project.

6.2 Protection of Children

Executive Order 13045 requires Federal agencies to examine proposed actions to determine whether they will have disproportionately high human health or safety risks on children. During the construction phase of the proposed project, heavy construction equipment and vehicles will be transported to the site. However, the construction area is located on U.S. Army property. Access for the general public will be prohibited during construction to prevent unauthorized personnel from entering the work area (including children). In addition, there will be a temporary increase in truck traffic transporting materials to and from the site. These trucks will be limited to public roadways and existing roads within the NSSC installation. Increased traffic will be of short duration and temporary. Therefore, the proposed project is not expected to cause any disproportionate direct, or indirect or cumulative environmental health or safety risks to children.

6.3 Floodplain Management

Executive Order No. 11988 Floodplain Management requires Federal agencies to evaluate the potential effects of any actions which may take place within floodplains. The

existing Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel 25017C0536F (dated July 7, 2014) covers the NSSC property. Floodplain designated on the NSSC property on the FIRM Panel (Number 536 of 859) is categorized as Zone A defined as areas with a 1% chance of flooding annually (see Figure 11). Due to the steep shoreline topography of the NSSC property, the 1% chance floodplain is identified as primarily a narrow area along the periphery of the NSSC main campus. There is no base flow elevation associated with the Zone A FIRM Panel floodplain.

Executive Order No. 11988 requires that Federal agencies restore and preserve the natural and beneficial values served by floodplains and that the short-term adverse impacts of work in floodplains be avoided to the extent possible. No habitable structures are proposed within the 1% chance floodplain with the S2PRINT project. An alternative analysis of replacement parking options (i.e., parking lot construction, re-striping and existing parking lot) was conducted as part of the preparation of the EA. There were two areas proposed for replacement parking lot construction; both were located within the floodplain. The level of development on the NSSC main campus was a limiting factor in citing a parking lot; both construction alternatives were located in previously disturbed areas. The construction of a parking lot south of the S2PRINT Building in combination with re-striping existing Parking Lot C was the selected alternative which minimized impact to the maximum extent practicable. In addition, the parking lot will be constructed using pervious pavement to infiltrate surface water. There will be some grading during construction however, the final elevation of the parking lot will not be higher than existing conditions and therefore, compensatory flood storage will not be required. The area around the lot will be seeded and planted using native vegetation.

6.4 Sustainable Development

The Sustainable Design and Development Principals are as follows:

- Meets the needs of the present without compromising the quality of life of future generations.
- Maintains economic growth while producing an absolute minimum of pollution, repairing environmental damages of the past, producing less waste, and extending opportunities to life in a pleasant and healthy environment.
- Meets human needs by maintaining a balance between development, social equality, ecology, and economics.
- Demands systematic considerations of environmental impact, energy use, natural resources, economy, and quality of life.
- Has optimal benefit only when addressed at the inception of a project, and throughout the entire life cycle of a project -- from concept to planning, to programming, design, construction, and ownership.

The recently updated Department of Army Sustainable Design and Development Policy (dated 17 January 2017) applies to all infrastructure planning, design, sustainment, restoration, modernization, and construction activities on Army installations and refers to the applicable guidelines as being The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ANSI/ASHRAE/USGBC/IES Standard 189.1-2014 [ASHRAE]) Standard for the Design of High-Performance Green Buildings. There are some noteworthy provision in the guidelines regarding the removal of invasive species, setbacks from wetlands and fish and wildlife conservation areas and work in floodplains which are pertinent to this project.

Policy guidelines regarding the removal of invasive species and use of native species for landscaping will be implemented as part of this project as previously discussed (removal of a mature Norway maple). Regarding development in the flood plain, Section 5.3.1.2 Prohibited Development Activity in ASHRAE 2014 states "There shall be no site disturbance or development on undeveloped land having an elevation lower than 5 feet (1.5 meters) above the elevation of the 100-year flood plain as defined by USFEMA." The proposed replacement parking appears to be located within USFEMA designated flood plain based on visual observation however, there is no base flood elevation available. It is assumed that the parking lot is within the flood elevation criteria cited in ASHRAE 2014 Section 5.3.1.2 based on the relatively level topography in the area. However, this prohibited activity is only applicable to "undeveloped land". The NSSC installation is considered urban land (USDA 2016) and the area proposed for replacement parking is partially disturbed and located adjacent to a road and as such, this prohibition is not applicable.

ANSI/ASHRAE/USGBC/IES Standard 189.1-2014 also prohibits development of land within 100 feet (35 meters) of any wetland. The proposed parking lot replacement project is located within 100 feet of a wetland (Lake Cochituate). An exception to this prohibition (Section 5.3.1.2(c) 2.) states "Site disturbance or development shall be allowed, provided that it involves plantings or habitat enhancement of the functions and values of the wetland." The parking lot will be constructed using pervious pavement to infiltrate surface water and native shrubs/trees will be planted for soil stabilization and habitat enhancement along the periphery. Therefore, the replacement parking construction will provide not only water quality benefits through surface water infiltration and soil stabilization but also, habitat enhancement to the benefits to the adjacent wetland.

6.5 Clean Air Act Conformity

Section 176 (c) of the Clean Air Act (CAA) requires that Federal agencies assure that their activities are in conformance with Federally-approved CAA state implementation plans for geographic areas designated as non-attainment and maintenance areas under the CAA. The U. S. Environmental Protection Agency (USEPA) General Conformity Rule to implement Section 176 (c) is found at 40 CFR Part 93. Clean Air Act compliance, specifically with the USEPA's General Conformity Rule, requires that all Federal agencies, review new actions and decide whether the actions would worsen an existing National Ambient Air Quality Standards

(NAAQS) violation, cause a new NAAQS violation, delay the State Implementation Plan (SIP) attainment schedule of the NAAQS, or otherwise contradict the State's SIP. Non-attainment areas are geographic regions where the air quality fails to meet the NAAQS. The six criteria air pollutants are ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter, and lead.

Middlesex County has met attainment the attainment standards for all six criteria; just recently meeting attainment standards for ozone. On March 12, 2008, a new 8-hour ozone standard became effective and the previous 8-hour ozone standard (1997) was revoked on February 13, 2017. Middlesex County achieved attainment for ozone when the 1997 ozone standard was revoked. Middlesex County which is in attainment for all six criteria air pollutants and therefore, a Federal Conformity Review is not required for this project.

In order to minimize air quality effects during construction, all construction operations will comply with applicable provisions of the Commonwealth of Massachusetts air quality control regulations pertaining to dust, odors, construction, noise, and motor vehicle emissions. No direct or indirect increases or other changes in local or regional air quality are likely to occur with the construction and operation of the proposed project.

6.6 Cumulative Impacts

The Council on Environmental Quality defines "cumulative impact" as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. The following section describes past, present and future federal projects at the NSSC installation.

The site was purchased by the Army in 1949 from the Metropolitan District Commission and primarily used as a forested recreational area. The Army built the Natick Laboratory in 1954 to support industrial, laboratory, research and development in food science, aero-mechanical, clothing, material, and equipment engineering work. At the present time, the NSSC campus has been almost entirely developed. The NSSC performs on-going repair and maintenance projects on existing buildings and recently completed the construction of a new gate house (in the same general area as the former gate house). The proposed project involves the demolition of buildings 30 and 112 and the construction of a new S2PRINT building within an already developed area. To provide replacement parking, a small parking lot will be constructed south of the new S2PRINT Building. Approximately half of the replacement parking site has already be previously disturbed (vegetation removal, compacted soils).

Future projects currently being planned at the NSSC include the redevelopment of the family housing areas located on either side of General Greene Avenue within the footprint of existing development; repair of an existing boat ramp; and installation of a boat pier. These

projects will be conducted in compliance with the National Environmental Policy Act and other federal, state and local laws and regulations.

The NSSC will also be preparing a new Real Property Master Plan (RPMP) to incorporate changes to the long-term vision since the 2014 RPMP Environmental Assessment (EA) was completed. The RPMP EA is a decision-support document where the recommended or proposed actions are assessed for their environmental effects in accordance with AR 210-20. A new EA will be prepared to evaluate the potential impacts and cumulative effects of projects being proposed as part of a new vision plan to assure that environmental mandates and considerations are incorporated in the planning process.

No cumulative impacts to NSSC fish and wildlife, federal or state protected species or cultural resources are anticipated when the proposed S2PRINT project is evaluated together with past, present and reasonably foreseeable actions. Socioeconomics of the area may benefit as construction employees utilize local businesses and provide additional short-term revenue in the local community.

7.0 LIST OF PREPARERS

U.S. Army Corps of Engineers, New England District

Name	Title	Education/Responsibility	Experience
Judith L. Johnson	Biologist	B.S. Wildlife Biology Responsible for the NEPA document preparation	37 years
Kathleen A. Atwood	Archaeologist	M.A. Responsible for compliance with National Historic Preservation Act	30 years

8.0 COORDINATION

Coordination was undertaken with the agencies listed below during the preparation of the Environmental Assessment and through the Notice of Availability 30-day public notice process. See Appendix A for Letters sent, letters received and response to comment letters.

Federal

U.S. Fish and Wildlife Service
U.S. Environmental Protection Agency

State

Massachusetts Department of Environmental Protection

Massachusetts Department of Conservation and Recreation
Division of Resource Conservation
Massachusetts Department of Fisheries, Wildlife and Law Enforcement
Division of Fish and Wildlife
Natural Heritage and Endangered Species Program
Massachusetts Historic Preservation Office

Local

Town of Natick – Town Administrator and Selectmen Office
Natick Soldier Systems Center Restoration Advisory Board (RAB)
Cochituate State Park Advisory Committee
Natick Conservation Commission

Tribes

Wampanoag Tribe of Gay Head (Aquinnah)

A Notice of Availability of the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) was published in local newspapers (see Appendix B) requesting comments during a 30-day period from November 24 to December 24, 2017. Copies of the EA and Draft FONSI were available on the U.S. Army Soldier Systems Center webpage, and at the local libraries. The Notice of Availability (NOA) of the EA and Draft FONSI was also sent to federal, state and local agencies listed in above with interest or jurisdiction with the project. In addition, copies of the NOA were also sent to NSSC residential abutters.

9.0 COMPLIANCE WITH ENVIRONMENTAL FEDERAL STATUTES AND EXECUTIVE ORDERS

Federal Statutes

1. Archaeological Resources Protection Act of 1979, as amended, 16 USC 470 et seq.

Compliance: Issuance of a permit from the Federal land manager to excavate or remove archaeological resources located on public or Indian lands signifies compliance.

2. Preservation of Historic and Archeological Data Act of 1974, as amended, 16 U.S.C. 469 et seq.

Compliance: Project has been coordinated with the State Historic Preservation officer. There will be no impacts to archaeological resources. Coordination with the State Historic Preservation continues as it cannot conclude until a building design is available for review.

3. American Indian Religious Freedom Act of 1978, 42 U.S.C. 1996.

Compliance: Must ensure access by Native Americans to sacred sites, possession of sacred objects, and the freedom to worship through ceremonials and traditional rites.

4. Clean Air Act (CAA), as amended, 42 U.S.C. 7401 et seq.

Compliance: Middlesex County is in attainment of all six criteria pollutants (i.e., carbon monoxide, nitrogen dioxide, sulfur dioxide, particulate matter, lead and ozone). As such, a Federal Conformity Review is not required for this project.

5. Clean Water Act of 1977 (Federal Water Pollution Control Act Amendments of 1972) 33 U.S.C. 1251 et seq.

Compliance: Not Applicable; project does not involve the discharge of dredged or fill material into a water of the U.S.

6. Coastal Zone Management Act of 1972, as amended, 16 U.S.C. 1451 et seq.

Compliance: Not Applicable; project is not located within the State designated coastal zone.

7. Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 et seq.

Compliance: Coordination with the U.S. Fish and Wildlife Service (FWS) signifies compliance with this Act.

8. Estuarine Areas Act, 16 U.S.C. 1221 et seq.

Compliance: Not applicable; report is not being submitted to Congress.

9. Federal Water Project Recreation Act, as amended, 16 U.S.C. 4601-12 et seq.

Compliance: Public notice of availability to the project report to the National Park Service (NPS) and Office of Statewide Planning relative to the Federal and State comprehensive outdoor recreation plans signifies compliance with this Act.

10. Fish and Wildlife Coordination Act, as amended, 16 U.S.C. 661 et seq.

Compliance: Projects are exempt include “activities for or in connection with programs primarily for land management and use carried out by Federal agencies with respect to Federal land under their jurisdiction” pursuant to 16 U.S.C. § 662 (h).

11. Land and Water Conservation Fund Act of 1965, as amended, 16 U.S.C. 4601-4 et seq.

Compliance: Public notice of the availability of this report to the National Park Service (NPS) and the Office of Statewide Planning relative to the Federal and State comprehensive outdoor recreation plans signifies compliance with this Act.

12. Marine Protection, Research, and Sanctuaries Act of 1971, as amended, 33 U.S.C. 1401 et seq.

Compliance: Not applicable; the project does not involve the transportation or disposal of dredged material in ocean waters pursuant to Sections 102 and 103 of the Act, respectively.

13. National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470 et seq.

Compliance: Coordination with the State Historic Preservation Office signifies compliance.

14. Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C. 3000-3013, 18 U.S.C. 1170

Compliance: Regulations implementing NAGPRA will be followed if discovery of human remains and/or funerary items occur during implementation of this project.

15. National Environmental Policy Act of 1969, as amended, 42 U.S.C 4321 et seq.

Compliance: Preparation of an Environmental Assessment signifies partial compliance with NEPA. Full compliance shall be noted at the time the Finding of No Significant Impact is issued.

16. Rivers and Harbors Act of 1899, as amended, 33 U.S.C. 401 et seq.

Compliance: No requirements for projects or programs authorized by Congress.

17. Watershed Protection and Flood Prevention Act as amended, 16 U.S.C 1001 et seq.

Compliance: The replacement parking lot will be located within the 100-year floodplain. No habitable structures will be built in the floodplain. The final elevation of the parking lot will not be higher than existing conditions.

18. Wild and Scenic Rivers Act, as amended, 16 U.S.C 1271 et seq.

Compliance: Not applicable.

19. Magnuson-Stevens Act, as amended, 16 U.S.C. 1801 et seq.

Compliance: Not applicable.

Executive Orders

1. Executive Order 11593, Protection and Enhancement of the Cultural Environment, 13 May 1971

Compliance: Coordination with the State Historic Preservation Officer signifies compliance.

2. Executive Order 11988, Floodplain Management, 24 May 1977 amended by Executive Order 12148, 20 July 1979.

Compliance: Public notice of the availability of this report or public review fulfills the requirements of Executive Order 11988, Section 2(a)(2).

3. Executive Order 11990, Protection of Wetlands, 24 May 1977.

Compliance: Public notice of the availability if this report for public review fulfills the requirements of Executive Order 11990, Section 2 (b).

4. Executive Order 12114, Environmental Effects Abroad of Major Federal Actions, 4 January 1979.

Compliance: Not applicable to projects located within the United States.

5. Executive Order 12898, Environmental Justice, 11 February 1994.

Compliance: Not applicable; the project is not expected to have a significant impact on minority or low-income population, or any other population in the United States.

6. Executive 13007, Accommodation of Sacred Sites, 24 May 1996

Compliance: Not applicable unless on Federal lands, then agencies must accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners, and avoid adversely affecting the physical integrity of such sacred sites.

7. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. 21 April, 1997.

Compliance: Not applicable if the project would not create a disproportionate environmental health or safety risk for children.

8. Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, 6 November 2000.

Compliance: Consultation with Indian Tribal Governments, where applicable, and consistent with executive memoranda, DoD Indian policy, and USACE Tribal Policy Principles signifies compliance.

Executive Memorandum

Analysis of Impacts on Prime or Unique Agricultural Lands in Implementing NEPA, 11 August 1980.

Compliance: The project area is located within urban land and therefore exempt from the Farmland Protection Policy Act.

White House Memorandum, Government-to-Government Relations with Indian Tribes, 29 April 1994.

Compliance: Consultation with Federally Recognized Indian Tribes, where appropriate, signifies compliance.

10.0 REFERENCES CITED

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE). 2014. ANSI/ASHRAE/USGBC/IES Standard 189.1-2014. *Standard for the Design of High-Performance Green Buildings*. Atlanta, GA: ASHRAE.

Banister et al., 2011 Archaeological Intensive Survey and Site Examination Investigations, Natick Soldier Systems Center, Five Acres, Natick SSC Site Locus 1 and Locus 3, Natick, Massachusetts.

Griffin, Nolte and Steinback. 2001 Architectural Inventory of the Natick Soldier Systems Center, for the U.S. Army Research Institute for Environmental Medicine. Prepared for USARIEM under contract with Panamerican Consultants, Inc., Buffalo, NY.

Massachusetts Department of Public Health (MA DPH). 2016. Public Health Fish Consumption Advisory website. <http://www.mass.gov/eohhs/gov/departments/dph/programs/environmental-health/exposure-topics/fish-wildlife/fish/freshwater-fish-consumption-advisory-list-and-map.html>

Massachusetts Department of Fish and Wildlife (MA DFW). 2011. Website for Trout Stocked Waters in 2011. http://www.mass.gov/dfwele/dfw/recreation/fishing/trout/trout_waters_nd.htm

Massachusetts Natural Heritage and Endangered Species Program (NHESP). 2017. Massachusetts Natural Heritage Atlas - 14th Addition. Website accessed 22 August 2017. <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/regulatory-review/regulatory-maps-priority-and-estimated-habitats/>

Massachusetts Natural Heritage and Endangered Species Program (NHESP). 2016. Email dated 14 March 2016 with a determination that there are no known winter hibernacula within 0.25 miles or known maternity roost trees within a 150 foot radius of the NCCS main campus.

Massachusetts Invasive Plant Advisory Group. 2005. The Evaluation of Non-Native Plant Species for Invasiveness in Massachusetts. April 1, 2005. <http://www.newfs.org/docs/docs/MIPAG040105.pdf>

Natick Soldier Systems Center (NSSC). 2004. Real Property Master Plan Long Range Component prepared for SSC, Natick, Massachusetts by R&K Engineering, Inc.

Natick Soldier Systems Center (NSSC). 2004. Real Property Master Plan Long Range Component prepared for SSC, Natick, Massachusetts by R&K Engineering, Inc.

Natick Soldier Systems Center (NSSC). 2007. First Five Year Review of U.S. Army Soldier Systems Center (SSC), town of Natick, Middlesex County, Massachusetts, Final January 2007. Prepared for the SSC Natick by ICF International, Lexington, MA.

Natick Soldier Systems Center (NSSC). 2009. FY2009 Soldier Systems Center Army Defense Environmental Restoration Program Installation Action Plan. Print 8 October 2009.

Natick Soldier Systems Center (NSSC). 2010a. U.S. Army Natick Soldier Systems Center Newsletter. Sediment Cleanup on Lake Cochituate. June 2010.

Natick Soldier Systems Center (NSSC). 2012. Asbestos Containing Materials (ACM) Building Survey Report dated March 23, 2012 was prepared by Mabbett & Associates, Inc. for the Department of the Army New England District Corps of Engineers and the U.S. Army Soldier Systems Center in Natick, Massachusetts.

Natick Soldier Systems Center (NSSC). 2013. Natick Soldier Systems Master Plan prepared by the US Army Corps of Engineers on behalf of the Soldier Systems Center. A Finding of No Significant Impact was signed by NSSC on January 28, 2014.

NEsoil.com. 2016. Soil Survey Data For New England States at the following website: <http://nesoil.com> [website accessed October 24, 2016].

PAL, Inc. and U.S. Army Corps of Engineers, New England District, 2012. Natick Soldiers Systems Center, Integrated Cultural Resources Management Plan, Natick, Massachusetts, Contract No. W912WJ—09-D-0001-036, with Woods Hole Group, Inc. East Falmouth, MA.

U.S. Army Corps of Engineers, New England District, 1997, Cultural Resource Management Plan, Natick Soldier Systems Command, Natick, Massachusetts.

U.S. Census Bureau. 2015a. Fact Sheet for the town of Natick, Middlesex County, Massachusetts. General Population and Housing Characteristics - 2010 Demographic Profile Data <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

U.S. Census Bureau. 2015b. Fact Sheet for the town of Natick, Middlesex County, Massachusetts. Selected Economic Characteristics 2009-2015 American Community Survey 5-Year Estimates. <http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

U.S. Department of Agriculture (USDA). 2016. Middlesex County Massachusetts Web Soil survey at the following website: <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm> [website accessed October 24, 2016].

U.S. Department of Defense. 2015. Office of the Deputy Assistant Secretary of Defense for Military Community & Family Policy (MC&FP) Military OneSource website for Military Installations – Natick Soldier Systems Center (NSSC), Massachusetts accessed 7/27/2015. http://www.militaryinstallations.dod.mil/MOS/f?p=132:CONTENT:0::NO::P4_INST_ID,P4_INST_TYPE:3195,INSTALLATION

U.S. Environmental Protection Agency (USEPA). 2015a. Waste Site Cleanup & Reuse in New England, Natick Laboratory Army Research, Development and Engineering Center. http://yosemite.epa.gov/r1/npl_pad.nsf/f52fa5c31fa8f5c885256adc0050b631/3DD14AD2EB18E10C8525691F0063F6D9?OpenDocument [website accessed September 14, 2015].

U. S. Environmental Protection Agency (USEPA). 2015b. OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface to Indoor Air. Prepared by the Office of Solid Waste and Emergency Response. June 2015. OSWER Publication 9200.2-154

U.S. Environmental Protection Agency (USEPA) 2016a. Environmental Protection Agency NPDES Permits in New England. 2003 Permit Archives. Website accessed April 24, 2017. <https://www3.epa.gov/region1/npdes/stormwater/2003-permit-archives.html>

U.S. Environmental Protection Agency (USEPA) 2016b. Environmental Protection Agency Draft Massachusetts Interstate, Northern Coastal/Merrimack and South Coastal Small MS4 General Permit Website accessed on October 28, 2016. http://www.epa.gov/region1/npdes/stormwater/MS4_MA.html

U.S. Fish and Wildlife Service (USFWS). 2015a. Species Profile for Northern long-eared bat (*Myotis septentrionalis*). Environmental Conservation Online System (ECOS). Website accessed September 17, 2015. <http://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?scode=A0JE>

U.S. Fish and Wildlife Service (USFWS). 2015b. Letter dated July 7, 2015 providing regional guidance to federal agencies on Endangered Species Act compliance for the Northern Long-Eared Bat. U.S. Fish and Wildlife Service, New England Field Office.

U.S. Fish and Wildlife Service (USFWS). 2015c. Endangered and Threatened Wildlife and Plants; Threatened Species Status for the Northern Long-Eared Bat With 4(d) Rule; Final Rule and Interim Rule. Federal Register 50 CFR Part 17/Vol. 80, No. 63 /Thursday, April 2, 2015 /Rules and Regulations.

U.S. Fish and Wildlife Service (USFWS). 2017a. Letter dated 29 March 2017 from the NSSC to the U.S. Fish and Wildlife Service to coordinate a “No Effect” determination for work conducted at the NSSC regarding the Northern Long-Eared Bat (NLEB) and establish a five (5) year timeframe for viability of the NLEB survey conducted at the NSSC during the summer of 2016.

U.S. Fish and Wildlife Service (USFWS). 2017b. USFWS consultation website <https://www.fws.gov/newengland/pdfs/MA%20species%20by%20town.pdf> [website assessed on April 25, 2017].

U.S. Geological Survey (USGS). 2015a. Geologic Provinces of the United States. Website accessed September 14, 2015. <http://geomaps.wr.usgs.gov/parks/province/appalach.html>

U.S. Geological Survey (USGS). 2015b. Concord River Drainage Basin. Website accessed September 14, 2015. <http://ma.water.usgs.gov/basins/concordgw.htm>

11.0 LIST OF ACRONYMS

AR – Army Regulation
AT/FP – Antiterrorism Force Protection
EA - Environmental Assessment
CAA – Clean Air Act
CEQ - Council of Environmental Quality
CFR – Code of Federal Regulation
CX – Categorical Exclusion
DPW – Department of Public Works
EA – Environmental Assessment
EIS – Environmental Impact Statement
FEMA – Federal Emergency Management Agency
FIRM – Federal Insurance Rate Map
FONSI – Finding of No Significant Impact
FPPA - Farmland Protection Policy Act
GIS – Geographic Information System
IMA - Installation Management Agency
ISU – International Salvage Union
LRC - Long Range Component
MA DCR – Massachusetts Department of Conservation and Recreation
MA DEP – Massachusetts Department of Environmental Protection
MA PGP – Massachusetts Programmatic General Permit
MA DPH – Massachusetts Department of Public Health
MESA - Massachusetts Endangered Species Act
MOU - Military Operation in Urban Terrain
MS4 – Municipal Separate Storm Sewer System
NAAQS – National Ambient Air Quality Standards
NEPA - National Environmental Policy Act
NCTRF – Navy clothing and Textile Research Facility
NPDES – National Pollution Discharge Elimination System

NRCS – Natural Resources Conservation Service
NSRDEC - Natick Soldier Research, Development and Engineering Center
NSSC - Natick Soldiers Systems Center
PCBs – Polychlorinated Byphenyls
PEO – Program Executive Office
REC – Record of Consideration
ROD – Record of Decision
RPMP – Real Property Master Plan
SIP – State Implementation Plan
SSCOM - U.S. Army Soldier Systems Command
SWMP – Stormwater Management Program
USARIEM - U.S. Army Research Institute of Environmental Medicine
USEPA – U.S. Environmental Protection Agency
USFWS - U.S. Fish and Wildlife Service
VOC – Volatile Organic Compound
WPA – Massachusetts Wetland Protection Act

Appendix A

Coordination – Letters Sent/Received/Response to Comment



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
US ARMY GARRISON, NATICK
10 GENERAL GREENE AVENUE
NATICK, MA 01760-5002

July 12, 2016

Christine A.P. Williams
Federal Facility Superfund Section
US EPA New England
5 Post Office Square - Suite 100
Mail Code - OSRR 07-3
Boston, Massachusetts 02109-3912

Dear Ms. Williams:

The U.S. Army Natick Soldier Systems Center (NSSC) is currently preparing an Environmental Assessment (EA) for the construction of a two-story laboratory building on the NSSC main campus. As shown on the NSSC location map (see Figure 1), the 78-acre NSSC Installation main campus is located on a peninsula in Lake Cochituate, in Natick, Massachusetts. The purpose of this letter is to request your comments on the proposed project.

The current laboratory facilities at the NSSC Installation are not equipped with the advanced physiological or technological capabilities required to achieve mission objectives and to maximize combat effectiveness. In addition, existing laboratory facilities at the NSSC are fully utilized. A detailed site analysis was performed by the U.S. Army Corps of Engineers (USACE) to identify and evaluate potential locations for the construction of a 78,500 square foot (sf) two-story laboratory building to support the Soldier Squad Performance Research Institute (S2PRINT) mission assignments and to offset deficits of laboratory facilities on the installation. Fourteen potential sites were identified and evaluated for the construction of the new building; ten of the sites were located on the NSSC facility and the four sites were located at separate NSSC housing properties in Natick, Hudson, Wayland, and Needham, Massachusetts.

The preferred construction site is located on the NSSC Installation main campus. The Murphy Clinic (Building 30) and a small trailer (Building 112) will be demolished as part of the project. In addition, the new facility will displace over 60 parking spaces requiring replacement parking to be provided as an extension to Parking Lot C (see Figure 2 - Proposed S2PRINT Building and Replacement Parking Location and Figure 3 - S2PRINT Building Site Plan).

The S2PRINT facility will contain advanced research and development capabilities and will also accommodate administrative, laboratory and storage space. Sustainable design principles shall be fully integrated into the design and construction of this project. The building, including building envelope, HVAC systems, service water heating, power and lighting systems, will be designed to reduce energy consumption. The project will be Leadership in Energy and Environmental Design (LEED) Silver certified.

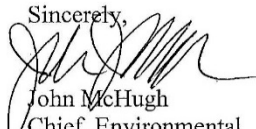
The replacement parking will be located north of the existing Parking Lot C (see Figure 4 Replacement Parking Site Plan). This proposed parking lot expansion will include 72 individual

spaces and 23,300 sf of impervious area. The parking lot will include stormwater treatment via catch basins with sumps and subsurface infiltration chambers. The parking lot is set back 40 feet from the wetland boundary in compliance with the Town of Natick Wetland Bylaw. Any temporary construction disturbance within the 40' setback will be re-seeded with native vegetation.

The Final Site Assessment Decision for the NSSC was completed on May 10, 1993 and the NSSC was identified as a Federal Superfund Site and placed on the U.S. Environmental Protection Agency's (USEPA) National Priority List for cleanup in 1994. At the present time, the USEPA has determined that potential or actual human exposures are under control at this site under current conditions. There are no Land Use Controls (LUCs) specified by the USEPA for activities above contaminated groundwater plumes however, there is a directive that requires that exposure to contaminated groundwater be prevented. The S2PRINT building will be built over an existing groundwater plume contaminated with tetrachloroethene (PCE) and trichloroethene (TCE) (see Figure 5 – Groundwater Contamination). In accordance with the USEPA technical guide entitled "Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soil", published in June 2015, an assessment of potential risk for vapor intrusion to the S2PRINT building will be undertaken to assure that appropriate measures are incorporated into the building design.

Should you have any additional questions, please contact me by email at john.j.mchugh.civ@mail.mil or by phone at 508-233-5404. Requests for additional information or comments on the project may also be directed to Ms. Judith Johnson, at the U.S. Army Corps of Engineers, New England Division by email at judith.l.johnson@usace.army.mil or by phone at 978-318-8138.

Sincerely,



John McHugh
Chief, Environmental
USAG-Natick

Figure 1 – Natick Soldier Systems Center Location Map

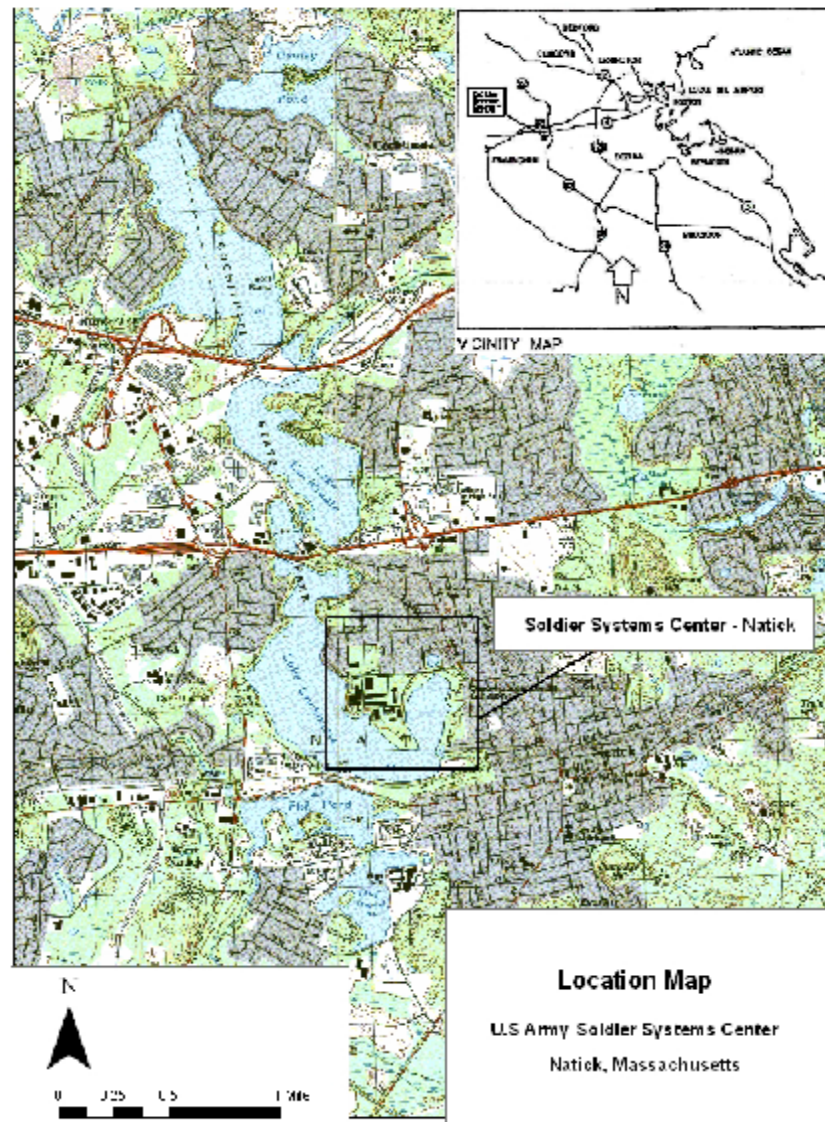


Figure 2 –Proposed S2PRINT Building and Replacement Parking Location



Figure 3 –S2PRINT Building Site Plan



Figure 4 – Replacement Parking Site Plan



Figure 5 – Groundwater Contamination at the NSSC



Similar letter sent to:

Mr. Robert Bois
Conservation Agent
Natick Conservation Commission
Natick Town Hall
13 East Central Street, 2nd Floor
Natick, Massachusetts 01760

Martha L. White
Town Administrator
Natick Town Hall
13 East Central Street, 2nd Floor
Natick, Massachusetts 01760

Timothy L. Timmermann
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Christine A.P. Williams
Federal Facility Superfund Section
US EPA New England
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Cochituate State Park Advisory Committee
61 Edgewood Road
Wayland, MA 01778

Andy Backman
Director of Regional Planning
Department of Conservation & Recreation
251 Causeway St
Boston, MA 02114

Susan Hamilton
Northeast Regional Director
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25 Shattuck Street
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A. Richard Miller
Cochituate State Park Advisory Committee
61 Lake Shore Road
Natick, MA 01760-2099

Eve Schluter
Chief of Environmental Review
Massachusetts Natural Heritage and
Endangered Species Program
Division of Fisheries and Wildlife
One Rabbit Hill Road
Westborough, Massachusetts 01581

Jack Buckley
Director
Division of Fisheries and Wildlife
One Rabbit Hill Road
Westborough, Massachusetts 01581

Mr. Tom Chapman, Supervisor
Department of the Interior
U.S. Fish and Wildlife Service
Ecological Services
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
5 Post Office Square, Suite 100
Mail Code OSRR 07-03
BOSTON, MASSACHUSETTS 02109-3912

July 27, 2016

Mr. John McHugh
U.S. Department of the Army
Environmental, Safety & Health Office
Soldiers Systems Center
Office Code: IMSS-PWE
10 General Greene Avenue
Natick, Massachusetts 01760-5049

Re: *Request for Comments on the New Building and Parking Lot Project at the Soldier Systems Center, Natick, Massachusetts*, letter dated July 12, 2016

Dear Mr. McHugh:

Thank you for providing the scope of the New Building and New Parking Lot Project prior to issuing an Environmental Assessment (EA).

As you are aware, there is a trichloroethene (TCE) groundwater plume that is fairly shallow at the location of your planned building. The Army should prepare a plan to address any vapor intrusion in the building and should handle any construction dewatering appropriately. As you know, the new parking lot is being built in an area where the Army removed contamination a few years ago, likely mitigating soil contamination issues; however, the Army should explore options to avoid work in the wetland buffer zone while also ensuring treatment of runoff to meet state/federal construction standards.

If possible, the Army should explore an alternative location for parking that would have no potential effect on wetlands or other resource areas. EPA supports the use of sustainable design principles for the project. If you have any questions concerning this letter, please contact me at (617) 918-1384.

Sincerely,

A handwritten signature in blue ink, which appears to read "Christine Williams", is positioned above the typed name.

Christine A.P. Williams, RPM
Federal Facilities Superfund Section

cc: Tim Timmermann, EPA (via e-mail only)
William Walsh-Rogalski, EPA (via e-mail only)
Joanne Dearden, MassDEP (via e-mail only)
Jim Connolly, SSC (via e-mail only)



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
US ARMY GARRISON, NATICK
10 GENERAL GREENE AVENUE
NATICK, MA 01760-5002

March 29, 2017

Mr. Tom Chapman, Supervisor
Department of the Interior
U.S. Fish and Wildlife Service
Ecological Services
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087

Dear Mr. Chapman:

The purpose of this letter is to report on the results of a Northern Long-Eared Bat (*Myotis septentrionalis*) presence/absence survey conducted by the Natick Soldier Systems Center (NSSC) during the summer of 2016 (see attached Natick Soldier Systems Center Summer Bat Survey) and to inform the U.S. Fish and Wildlife Service (USFWS) of the NSSC effects determination for Northern Long-Eared Bat (NLEB). Survey results showed an absence of NLEB on the NSSC property. As such, the NSSC has made a determination that there will be "No Effect" on the NLEB for projects conducted on NSSC property (e.g., operation and maintenance, construction, etc.) and that the survey results are valid for a period of five years (August 2016-2021). The NSSC will resume coordination with your office, pursuant to the Endangered Species Act, for projects with the potential to affect the NLEB after August 2021, as determined to be necessary at that time. The reasoning for this "No Effect" determination is discussed in the following paragraphs.

On April 2, 2015, the NLEB was listed as threatened under the Endangered Species Act due to population declines caused by white-nose syndrome and a final 4(d) Rule was published in the *Federal Register* on January 14, 2016. The NLEB is listed by the U.S. Fish and Wildlife Service as being present throughout Massachusetts. The NSSC is located in the town of Natick, Middlesex County, Massachusetts (see attached Location Map).

Bat Conservation and Management (Project Principal John Chenger), acting on behalf of the NSSC, deployed passive acoustic monitoring devices on the 78-acre NSSC property during the summer of 2016 (from June 16th to August 18th 2016). The study comprised four acoustic sites adventitiously sited to detect the highest potential of bat echolocation calls within the NSSC facility. The survey intended to make full spectrum recordings of bat echolocation calls during the summer maternity season when pregnant/lactating females and their pups are most active and most likely to be encountered.

The four acoustic monitoring sites resulted in a combined total of 248 monitoring nights, yielding a total of 28,416 confirmed bat passes. Utilizing an acoustic software program with auto classification followed by manual analysis by an expert acoustic bat analyst, a total of six

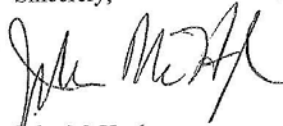
bat species were confirmed at NSSC during summer 2016. The following species can be considered to be present: the Big Brown bat (*Eptesicus fuscus*), the Silver-haired bat (*Lasionycteris noctivagans*), the Eastern Red bat (*Lasiurus borealis*), the Hoary bat (*Lasiurus cinereus*), and the Tri-colored bat (*Perimyotis* (formerly *Pipistrellus*) *subflavus*).

Ten recordings collected from three of the four monitoring sites were classified as belonging to *Myotis* species, but upon manual review they were all ambiguous and none could be confirmed as evidence of NLEB occupancy. The limitations of current acoustic monitoring technology attribute these calls to either the Indiana bat and/or Little Brown bat. Considering the Indiana Bat is not listed by the USFWS as being present in Massachusetts, the NSSC presumes these ambiguous calls may be attributed to the Little Brown bat. The NSSC also coordinated with the Massachusetts Natural Heritage and Endangered Species Program (NHESP) regarding the location of hibernacula and maternity roost trees in the vicinity. An email dated 14 March 2016 from the NHESP stated that the project area was not located within 0.25 miles of a known winter hibernacula or within a 150 foot radius of a known maternity roost tree (see attached email from the NHESP).

As previously stated, because the NLEB was found to be absent from the NSSC property, the NSSC determined that work conducted on the NSSC property (e.g. operation and maintenance, construction projects, etc.) will have "No Effect" on the NLEB. In addition, there is little likelihood that the population will rebound sufficiently to repopulate areas and there are so few NLEB's remaining that it is unlikely that a maternity colony will form in the interim since there is no evidence of their presence now. Therefore, the NSSC considers these survey results to be valid for a period of five years (August 2016 to August 2021).

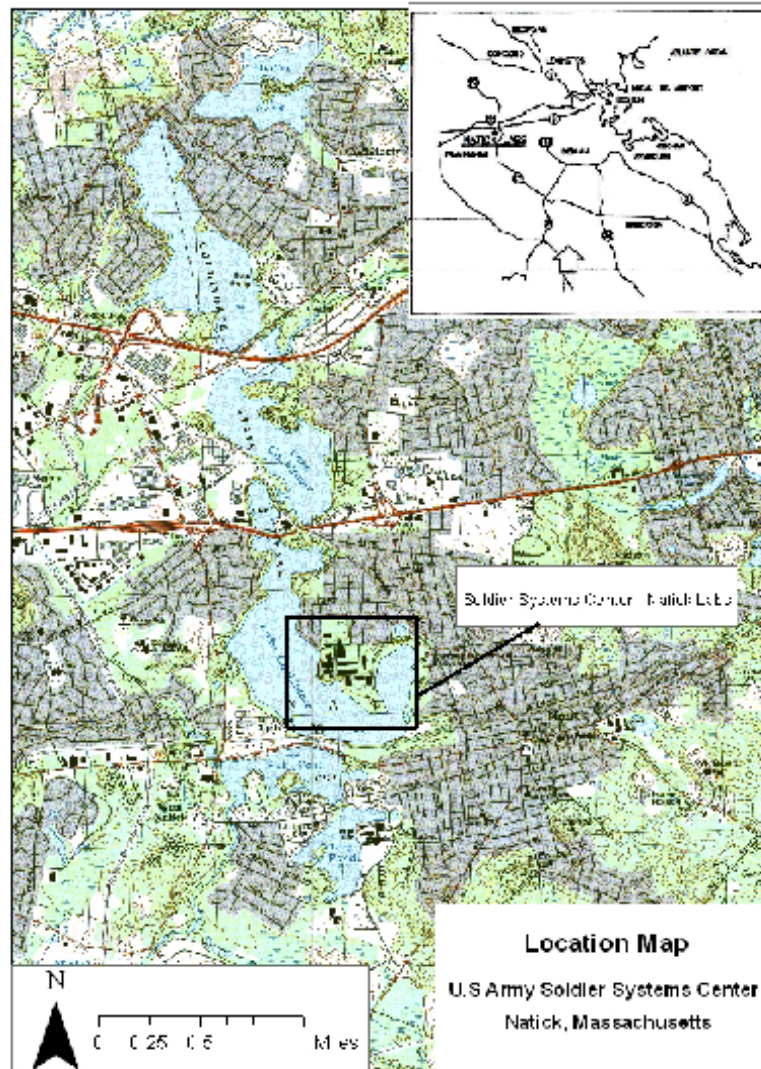
The NSSC will assume your concurrence with this finding if no response is received from your office within a period of 30 days from the date of this letter. Should you have any additional question, please contact me by email at john.j.mchugh.civ@mail.mil or by phone at 508-233-5404. Requests for additional information or comments on the project may also be directed to Ms. Judith Johnson, at the U.S. Army Corps of Engineers, New England Division by email at judith.l.johnson@usace.army.mil or by phone at 978-318-8138.

Sincerely,



John McHugh
Chief, Environmental
USAG-Natick

Enclosures:



From: [Glorioso, Lauren \[PWS\]](#)
To: [Johnson, Judith L MAE](#)
Subject: (EXTERNAL) RE: Northern Long-eared bat hibernacula and maternity roost
Date: Monday, March 14, 2016 10:51:38 AM

Mr. Johnson,

Thank you for contacting the Natural Heritage and Endangered Species Program of the MA Division of Fisheries & Wildlife (the "Division") for information regarding the Northern Long-eared Bat (*Myotis septentrionalis*) in the vicinity of the Norick Soldier Systems Center. Based on the information contained in our database, the Division has determined that this project, as currently proposed, does not occur within 0.25 miles of a known winter hibernacula or within a 150 foot radius of a known maternity roost tree. Therefore, no further review of potential impacts to Northern Long-eared Bat is required pursuant to the MESA. This evaluation is based on the most recent information available in the Natural Heritage database, which is constantly being expanded and updated through ongoing research and inventory. If you have additional questions, please let me know.

Sincerely,

Lauren Glorioso

Endangered Species Review Assistant

Natural Heritage & Endangered Species Program | Division of Fisheries & Wildlife | 1 Rabbit Hill Road |
Warehove, MA 01581 | ph: 508-389-6361 | fax: 508-389-7860 | lauren.glorioso@state.ma.us |
Blocked: www.mass.gov/nhesp



DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND
US ARMY GARRISON, NATICK
10 GENERAL GREENE AVENUE
NATICK, MA 01760-5002

May 2, 2017

Christine A.P. Williams
Federal Facility Superfund Section
US EPA New England
5 Post Office Square - Suite 100
Mail Code - OSRR 07-3
Boston, Massachusetts 02109-3912

Dear Ms. Williams:

The purpose of this letter is respond to comments in your letter dated July 27, 2016 regarding the proposed construction of the Soldier Squad Performance Research Institute (S2PRINT) Building (a two-story laboratory) on the main campus of the U.S. Army Natick Soldier Systems Center (NSSC) (see Figure 1 – Natick Soldier Systems Center Location Map and Figure 2 - Proposed S2PRINT Building and Replacement Parking Alternative Locations). Your letter requested that a plan be prepared to address the potential for vapor intrusion into the new S2PRINT Building and to appropriately handle construction dewatering (if necessary) due to the proposed location of the new building over groundwater contaminated with trichloroethene (TCE). Your letter also requested that an alternative analysis be prepared for differing replacement parking locations since the replacement parking proposed at that time (north of an existing Parking Lot C) was within the 100-foot wetland buffer zone of Lake Cochituate.

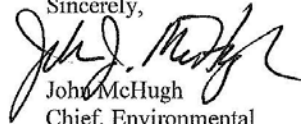
With regard to the potential for vapor intrusion, TCE contaminated groundwater in the new S2PRINT Building area is approximately 28 feet below the ground surface elevation. To mitigate the potential for vapor intrusion, the NSSC will install a low-permeability membrane between the soil and the building during building construction as recommended in the June 2015 Office of Solid Waste and Emergency Response (OSWER) Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor to Indoor Air prepared by the U.S. Environmental Protection Agency. It is anticipated that this vapor barrier will be sufficient to prevent vapor intrusion into the new building. Additional measures (e.g., installation of an Active Depressurization Technologies [ADT] system) will be also be installed if determined to be necessary during post-construction monitoring. In addition, construction dewatering, if necessary, will be handled in accordance with applicable federal and state regulations.

With regard to replacement parking, the construction of the S2PRINT Building results in the permanent loss of approximately 60 parking spaces. The construction of replacement parking was proposed to be located north of Parking Lot C (which provided 76 spaces). The NSSC has since evaluated two additional alternatives for replacement parking: Re-striping of Parking Lot C (which added 33 parking spaces) and the Construction of Replacement Parking South of the S2PRINT Building (which provided 32 parking spaces) (see Figure 2 - Proposed S2PRINT Building and Replacement Parking Locations). There were no suitable alternatives located on the main campus outside of the 100-foot buffer zone.

The preferred alternative was revised to include the construction of a new parking lot south of the S2PRINT Building in combination with the re-stripping of Parking Lot C which will provide a total of 65 spaces. While the construction of this new parking lot south of the S2PRINT Building is still located within the 100-foot wetland buffer, it is located further away from Lake Cochituate, between 50 and 90 feet as compared to 40 feet for the previously proposed alternative located north of the Parking Lot C. In addition, the currently proposed parking lot (south of the S2PRINT Building) reduces the total amount of pavement by 13,720 (0.31 acres) due to its smaller size, and the parking lot will also be constructed using pervious pavement to infiltrate surface water. Therefore, the combination of constructing a smaller parking lot and re-stripping the existing Parking Lot C was determined to be the preferred alternative for replacement parking.

Should you have any additional questions, please contact me by email at john.j.mchugh.civ@mail.mil or by phone at 508-233-5404. Requests for additional information or comments on the project may also be directed to Ms. Judith Johnson, at the U.S. Army Corps of Engineers, New England Division by email at judith.l.johnson@usace.army.mil or by phone at 978-318-8138.

Sincerely,



John J. McHugh
Chief, Environmental
USAG-Natick

Figure 1 – Natick Soldier Systems Center Location Map

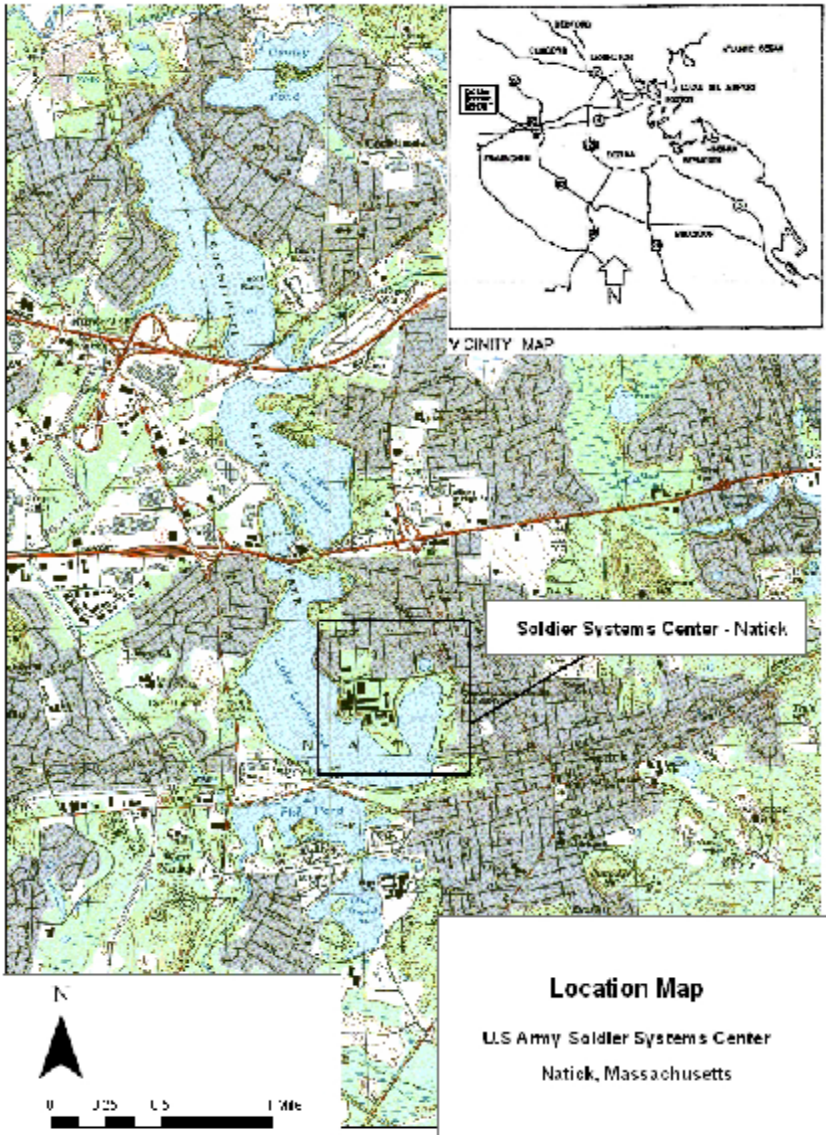


Figure 2 –Proposed S2PRINT Building and Replacement Parking Alternative Locations





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND - REGION I
5 Post Office Square, Suite 100
Mail Code OSRR 07-03
BOSTON, MASSACHUSETTS 02109-3912

May 8, 2017

Mr. John McHugh
U.S. Department of the Army
Environmental, Safety & Health Office
Soldiers Systems Center
Office Code: IMSS-PWE
10 General Greene Avenue
Natick, Massachusetts 01760-5049

Re: *Army Responses to EPA comments on the New Building and Parking Lot Project at the Soldier Systems Center, Natick, Massachusetts*, letter dated May 2, 2017

Dear Mr. McHugh:

Thank you for the responses to our comments. They are responsive and Army has improved the design/layout. We have no additional comments and look forward to reviewing the Environmental Assessment once that is submitted.

If you have any questions concerning this letter, please contact me at (617) 918-1384.

Sincerely,

A handwritten signature in blue ink, appearing to read "Christine Williams".

Christine A.P. Williams, RPM
Federal Facilities Superfund Section

cc: Anni Loughlin, EPA (via e-mail only)
Tim Timmermann, EPA (via e-mail only)
William Walsh-Rogalski, EPA (via e-mail only)
David Chaffin, MassDEP (via e-mail only)
Jim Connolly, SSC (via e-mail only)

Appendix B

Notice of Availability of the Environmental Assessment and DRAFT Finding of No Significant Impact

**LEGAL NOTICE
PUBLIC NOTICE OF AVAILABILITY
ENVIRONMENTAL ASSESSMENT AND DRAFT FINDING OF NO SIGNIFICANT IMPACT
FOR THE U.S. ARMY NATICK SOLDIER SYSTEMS CENTER
SOLDIER SQUAD PERFORMANCE RESEARCH INSTITUTE BUILDING CONSTRUCTION
NATICK, MASSACHUSETTS**

Pursuant to the Council on Environmental Quality regulations for implementing the procedural provisions of the National Environmental Policy Act (40 CFR 1500), and 32 CFR 651 Environmental Analysis of Army Actions, the U.S. Army conducted an Environmental Assessment (EA) of the potential environmental and socioeconomic effects associated with the U.S. Army Natick Soldier Systems Center Soldier Squad Performance Research Institute (S2PRINT) Building construction project located in Natick, Massachusetts.

The EA is a decision-support document completed to evaluate the potential impacts and cumulative effects of the S2PRINT project pursuant to 32 CFR 651. The EA also provides responsible and timely protection, conservation, and enhancement of project environmental and cultural resources and ensures environmental mandates and considerations are incorporated in the planning process.

The EA and Draft Finding of No Significant Impact (FONSI) will undergo a 30-day public comment period, from November 24 through December 24. This is in accordance with requirements specified in 32 CFR Part 651.14 Environmental Analysis of Army Actions. During this period, the public may submit comments on the proposed action and the EA.

The EA and Draft FONSI is available on the U.S. Army Natick Soldier Systems Center website at: www.natick.army.mil/garrison/pao/S2PRINT.pdf

Printed copies of the EA and Draft FONSI can also be viewed at the following local libraries:

Bacon Free Library
58 Elliot Street
Natick, MA 01760

Morse Institute Library
14 East Central Street
Natick, MA 01760

Comments on the EA and Draft FONSI should be submitted during the 30-day public comment period via mail, fax, or electronic mail to:

Ms. Judith Johnson
U.S. Army Corps of Engineers
Evaluation Branch
696 Virginia Road
Concord, Massachusetts 01742-2751
fax: (978) 318-8560
e-mail: judith.l.johnson@usace.army.mil

